

AD-A187 845

GRAND FORKS AIR FORCE BASE NORTH DAKOTA REVISED UNIFORM

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SUMMARY OF SURFAC (U) AIR FORCE ENVIRONMENTAL

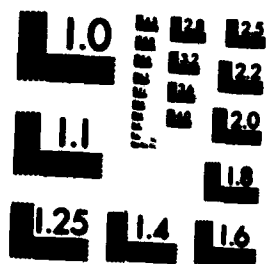
TECHNICAL APPLICATIONS CENTER SCOTT A... NOV 87

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USAFETAC/DS-87/873

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MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

DTIC FILE COPY

USND 727575

USAFETAC/DS-87/073

FL 4414  
SCOTT AFB, IL 62225-5458

28 NOV 1987

AD-A187 845

**OPERATING LOCATION - A**  
**USAFETAC**  
**Air Weather Service (MAC)**



**REVISED UNIFORM SUMMARY OF  
SURFACE WEATHER OBSERVATIONS**

GRAND FORKS AFB ND  
N 47 58 W 097 24 ELEV 911 FT KROR

MBC 727575

PARTS A - F HOURS SUMMARIZED 0000 - 2300 LST

**PERIOD OF RECORD:**

HOURLY OBSERVATIONS: AUG 77 - JUL 87

SUMMARY OF DAY DATA: JUN 59 - JUL 87

NOV 20 1987

"Approved for public release;  
Distribution Unlimited."

**FEDERAL BUILDING**  
**ASHEVILLE, N.C. 28801-2723**

**DTIC**  
**ELECTE**  
**DEC 09 1987**

87 11 30 87

REPORT DOCUMENTATION PAGE

- 1a. Report Security Classification: UNCLASSIFIED
3. Distribution/Availability of Report: Approved for public release; Distribution unlimited.
4. Performing Organization Report Number: USAFETAC/DS-87/073.
5. Monitoring Organization Report Number: USAFETAC/DS-87/073.
- 6a. Name of Performing Organization: USAFETAC/OL-A
- 6b. Office Symbol:
- 6c. Address: Federal Building, Asheville, NC 28801-2723.
11. Title: (RUSSWO) Grand Forks AFB ND.
12. Personal Author(s):
- 13a. Type of Report: Data Summary
- 13b. Time Covered: Jun 59-Jul 87.
14. Date of Report: Nov 87
15. Page Count: 312
16. Supplementary Notation:
17. COSATI Codes: Field--04, Group--02
18. Subject Terms: \*climatology; \*weather; meteorological conditions; winds; precipitation; temperature; visibility; barometric pressure; relative humidity; sky cover; psychrometric data; ceiling; Revised Uniform Summary of Surface Weather Observations (RUSSWO); Grand Forks AFB ND; North Dakota; USND727575.
19. Abstract: A six-part statistical data summary of surface weather observations for: Grand Forks AFB ND. Summary consists of: PART A, Weather Conditions and Atmospheric Phenomena; PART B, Precipitation; PART C, Surface Winds; PART D, Ceiling and Visibility; PART E, Psychrometric Summaries; PART F, Pressure Summaries. See USAFETAC/TN-83/001 (ADA132186), An Aid for Using the Revised Uniform Summary of Surface Weather Observations (RUSSWO) for complete description of contents and instructions for use. ←
20. Distribution/Availability of Abstract: Same as report.
21. Abstract Security Classification: UNCLASSIFIED.
- 22a. Name of Responsible Individual: Marianne L. Cavanaugh
- 22b. Telephone: (618)256-2625
- 22c. Office Symbol: USAFETAC/LDD



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STATION NAME: GRAND FORKS AFB ND

STATION NUMBER: 727575

CALL ID: KROR

PERIOD OF RECORD:

HOURS SUMMARIZED: 0000-2300 LST  
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 tion

HOURLY OBSERVATIONS: AUG 77 - JUL 87

SUMMARY OF DAY DATA: JUN 59 - JUL 87

TIME CONVERSION LST TO GMT: +6

DATE PRODUCED: 10 NOV 1987

By	
Distribution/	
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Dist	Avail and/or Special
A-1	3

OL-A/USAFETAC/MAC/AWS  
ASHEVILLE NC 28801

REVISED UNIFORM SUMMARY OF SURFACE WEATHER OBSERVATIONS

HOURLY OBSERVATIONS: ALL RECORD OR RECORD SPECIAL OBSERVATIONS RECORDED ON THE AWS FORMS 10/10A AT SCHEDULED HOURLY INTERVALS.

SUMMARY OF DAY DATA (DAILY OBSERVATIONS): DATA COMPILED FROM ALL AVAILABLE OBSERVATIONS WHICH INCLUDES HOURLY OBSERVATIONS AND DAILY DATA RECORDED IN COLUMNS 66-73, AWS FORMS 10/10A.

DESCRIPTION OF SUMMARIES: PRECEDING EACH PART OF THE RUSSWO IS A BRIEF DISCUSSION OF THE SUMMARY INCLUDING THE MANNER OF PRESENTATION.

STANDARD 3-HOUR TIME GROUPS: IN ALL SUMMARIES SHOWING DIURNAL VARIATIONS, WE SUMMARIZE DATA USING THE FOLLOWING EIGHT 3-HOUR TIME PERIODS IN LOCAL STANDARD TIME: 0000-0200, 0300-0500, 0600-0800, 0900-1100, 1200-1400, 1500-1700, 1800-2000, 2100-2300 LST.

FOR A DETAILED DESCRIPTION OF EACH SUMMARY WITH EXAMPLES AND EXERCISES ON ITS USAGE, SEE USAFETAC/TN-83-001, "AN AID FOR USING THE REVISED UNIFORM SUMMARY OF SURFACE WEATHER OBSERVATIONS" (RUSSWO).

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PART D: CEILING VERSUS VISIBILITY AND SKY COVER SUMMARIES

PART E: TEMPERATURE AND RELATIVE HUMIDITY SUMMARIES

PART F: PRESSURE SUMMARIES

AWSHC NUMBER: THIS NUMBER IS THE AIR WEATHER SERVICE MASTER STATION CATALOG NUMBER. THIS NUMBER IS COMPRISED OF THE WMO NUMBER WITH THE ADDITION OF A SUFFIX (0 THROUGH 9). IN CASES WHERE THERE IS NO DESIGNATED WMO NUMBER, A 5-DIGIT NUMBER IS CREATED IN AGREEMENT WITH WMO RULES PLUS A SIXTH DIGIT. THESE NUMBERS ARE ALSO REFERRED TO AS DATSAV OR USAFETAC NUMBERS WHICH UNIQUELY IDENTIFY MORE THAN 15,000 REPORTING STATIONS WORLD WIDE.

STATION NO. ON SUMMARY	STATION NAME	LATITUDE	LONGITUDE	STATION ELEV. (FT)	CALL SIGN	WIND NUMBER
727575	GRAND FORKS AFB NORTH DAKOTA	N 47 58	W 097 24	911	RDR	

## STATION LOCATION AND INSTRUMENTATION HISTORY

NUMBER OF LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		WGS PER DAY
			FROM	TO			STATION (FT)	TYPE BAROMETER	
1	Grand Forks AFB ND	AFB	Sep 59	Mar 62	N 47 56	W 097 23	911	905	24
2	Same	Same	Apr 62	Dec 70	N 47 58	W 097 24	Same	Same	24
3	Same	Same	Jan 71	Feb 78	N 47 57	Same	Same	Same	24
4	Same	Same	Mar 78	Jul 87	N 47 58	Same	Same	Same	24

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1	Sep 59	Located on top of Control Tower	AN/GMQ 1	N/A	80 ft	
2	Apr 60	Located 1560 ft N and 950 ft E of end of runway 35.	AN/GMQ 11	RO-2A	15 ft	
3	Apr 61	Located 1560 ft N of S end of runway and 950 ft E of centerline.	Same	Same	Same	
4	Apr 66	1. Located 1560 ft N of S end of runway & 950 ft E of centerline runway 35. 2. Located 1000 ft S of N end of runway and 500 ft E of centerline runway 17.	Same	Same	Same	
5	May 69	1. No change. 2. No change.	Same	RO-362	Same	

USAFETAC FORM 0-19 (OL A)

CONTINUED ON REVERSE SIDE

NUMBER OF STATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT. ABOVE GROUND	
6	Jan 71	1. Located 2800 ft N of the S end of Rwy and 900 ft E of centerline of Rwy 35. 2. Located 2200 ft S of the N end of rwy and 400 ft E of the center- line of Rwy 17.	GMQ-11  Same	RO-362	15 ft  Same	
7	Feb 78	1. Same 2. Same	Same Same	Same	Same Same	
8	Jul 87	1. Same 2. Same	Same	Same	Same	

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## WEATHER CONDITIONS AND ATMOSPHERIC PHENOMENA SUMMARIES

### WEATHER CONDITIONS SUMMARY

1. A PERCENTAGE FREQUENCY OCCURRENCE SUMMARY OF VARIOUS ATMOSPHERIC PHENOMENA AND OBSTRUCTIONS TO VISION.
2. DATA BASED ON HOURLY OBSERVATIONS.
3. SUMMARIZED BY THE STANDARD 3-HOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED).

### ATMOSPHERIC PHENOMENA SUMMARY

1. A PERCENTAGE FREQUENCY OF DAYS SUMMARY OF VARIOUS ATMOSPHERIC PHENOMENA AND OBSTRUCTIONS TO VISION.
2. DATA BASED ON SUMMARY OF DAY DATA.
3. SUMMARIZED BY MONTH WITH ALL HOURS AND ALL YEARS COMBINED.

### DEFINITIONS:

THUNDERSTORMS: ALL REPORTED THUNDERSTORMS, TORNADOES AND WATERSPOUTS.

RAIN AND/OR DRIZZLE: ALL REPORTED RAIN AND OR DRIZZLE FALLING TO THE GROUND BUT NOT FREEZING.

FREEZING RAIN AND/OR FREEZING DRIZZLE (GLAZE): ALL REPORTED FREEZING RAIN OR FREEZING DRIZZLE.

SNOW AND/OR SLEET. SNOW INCLUDING SNOW PELLETS AND GRAINS, ICE CRYSTALS AND PELLETS. AND/OR SLEET (ICE PELLETS).

HAIL: ALL REPORTED HAIL.

ALL PRECIPITATION: THIS CATEGORY INCLUDES ALL OBSERVATIONS REPORTING PRECIPITATION. BECAUSE MORE THAN ONE TYPE OF PRECIPITATION MAY APPEAR IN A SINGLE OBSERVATION, THE SUM OF THE PERCENTAGES IN THE INDIVIDUAL COLUMNS MAY EXCEED THE PERCENTAGES IN THIS COLUMN.

FOG: ALL REPORTED FOG, ICE FOG AND GROUND FOG.

SMOKE AND/OR HAZE: ALL REPORTED SMOKE, HAZE AND ANY COMBINATION THEREOF.

BLOWING SNOW: ALL REPORTED BLOWING SNOWS INCLUDING DRIFTING WHEN REPORTED.

DUST AND/OR SAND: ALL REPORTED DUST, SAND, BLOWING DUST, BLOWING SAND AND ANY COMBINATION THEREOF. THE ATMOSPHERIC PHENOMENA SUMMARY (DAYS WITH) INCLUDES ONLY THOSE REPORTS WHEN THE PHENOMENA VISIBILITY LESS THAN 5/8 MILES (1000 METERS).

ALL OBSTRUCTIONS TO VISION: INCLUDES ALL REPORTS OF OBSTRUCTIONS TO VISION (FOG THRU DUST/SAND) AND BLOWING SPRAY. BECAUSE MORE THAN ONE PHENOMENA PER OBSERVATION MAY OCCUR, THE SUM OF THE INDIVIDUAL COLUMNS MAY EXCEED THIS COLUMN.

NOTES:

1. A VALUE IN THE TABLES OF ".0" INDICATES LESS THAN .05% OCCURRENCE WHICH IS USUALLY ONLY ONE OCCURRENCE
2. METAR STATIONS (BEGINNING IN JAN 1968) AND SYNOPTIC REPORTING STATIONS RECORDED ON THE AUS FORMS 10/10A AND TRANSMITTED LONGLINE ONLY THE HIGHEST ORDER OF ATMOSPHERIC PHENOMENA OBSERVED. BEGINNING IN JAN 1970, METAR STATIONS RECORDED ALL OBSERVED PHENOMENA BUT CONTINUED TO TRANSMIT ONLY THE HIGHEST ORDER. FOR EXAMPLE, IF THE OBSERVATION CONTAINED RAIN, FOG AND SMOKE, ALL THREE WILL APPEAR ON THE AUS FORMS 10/10A, BUT ONLY THE RAIN WAS TRANSMITTED LONGLINE. THEREFORE ONLY THE RAIN APPEARS IN OUR DATA BASE FOR HOURLY SUMMARIZATION. THIS PRACTICE EFFECTS THE PERCENTAGES IN THE TABLES.

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JAN

HOURS (LST)	TSTMS	RAIN 6/0R DRIZZLE	FRZING RAIN 6/0R DRIZZLE	SNOW 6/0R SLEET	WAIL	% OBS WITH PRECIP	FOG	SMOKE 6/0R HAZE	BLOWING SNOW	DUST 6/0R SAND	% OBS W/OBST TO VISION	TOTAL OBS
00-02			.6	24.8		25.4	2.9		7.7		10.6	930
03-05			.6	24.1		24.5	3.2		8.5		11.7	930
06-08			.5	22.9		23.7	3.5		7.6		11.2	930
09-11			.4	19.1		19.5	6.2	.6	9.6		16.2	930
12-14			.1	19.7		19.7	5.2	1.7	13.1	.1	19.4	930
15-17		.2	.1	19.2		19.2	4.3	1.3	12.3	.2	17.3	930
18-20			.2	21.5		21.6	3.2	.3	10.3	.1	13.9	930
21-23		.2	.4	25.1		25.7	3.0	.1	8.8		11.9	930
TOTALS		.1	.4	22.1		22.4	3.9	.5	9.7	.1	14.0	7440

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: FEB

HOURS (LST)	TSTMS	RAIN 6/0R DRIZZLE	FRZING RAIN 6/0R DRIZZLE	SNOW 6/0R SLEET	WAIL	% OBS WITH PRECIP	FOG	SMOKE 6/0R HAZE	BLOWING SNOW	DUST 6/0R SAND	% OBS W/OBST TO VISION	TOTAL OBS
00-02			3.2	21.9		24.1	11.3		5.3		16.5	846
03-05		1.1	2.2	22.6		25.5	11.0	.1	5.3		16.4	846
06-08		.7	3.7	22.7		26.6	11.9	.2	5.6		17.6	846
09-11		.9	1.8	22.7		24.8	13.5	1.8	7.6		22.8	846
12-14		.8	.9	20.8		22.2	13.1	2.1	10.6	.1	25.3	846
15-17		.8	1.2	21.9		23.5	12.8	2.1	10.0	.5	24.2	846
18-20		.1	1.7	18.8		19.9	12.1	1.5	5.3		18.4	846
21-23			1.7	21.2		22.1	11.1	.5	5.0		16.5	846
TOTALS		.6	2.1	21.6		23.6	12.1	1.0	6.8	.1	19.7	6768



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAR

HOURS (LST)	TSTMS	RAIN 6/0R DRIZZLE	FRZING RAIN 6/0R DRIZZLE	SNOW 6/0R SLEET	HAIL	% OBS WITH PRECIP	FOG	SMOKE 6/0R HAZE	BLOWING SNOW	DUST 6/0R SAND	% OBS W/OBST TO VISION	TOTAL OBS
00-02	.1	4.3	.6	11.7		16.1	7.7		2.3		10.0	930
03-05		3.5	1.1	14.4		17.8	8.8		3.2		11.9	930
06-08	.1	5.2	1.5	14.4		20.0	15.2		3.2		18.1	930
09-11		4.4	.5	14.3		18.8	15.8	.9	5.7	.5	22.4	930
12-14		3.4	.2	12.5		16.0	11.1	1.1	4.9	.5	16.9	930
15-17		3.5	.4	11.2		14.4	9.8	1.8	4.3	.3	15.8	930
18-20		4.3	.6	11.7		16.0	10.8	.8	3.5	.4	15.4	930
21-23		4.3	.9	10.0		14.4	10.2	.2	2.7	.2	13.1	930
TOTALS	.0	4.1	.7	12.5		16.7	11.2	.6	3.7	.2	15.5	7440

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: APR

HOURS (LST)	TSTMS	RAIN 6/0R DRIZZLE	FRZING RAIN 6/0R DRIZZLE	SNOW 6/0R SLEET	HAIL	% OBS WITH PRECIP	FOG	SMOKE 6/0R HAZE	BLOWING SNOW	DUST 6/0R SAND	% OBS W/OBST TO VISION	TOTAL OBS
00-02	.2	8.0	.4	5.0	.1	11.9	4.0		.8	.9	5.7	900
03-05	.3	6.4		5.0		10.3	5.0	.1	1.1	.4	6.7	900
06-08	.7	7.0		4.7	.1	10.4	7.8		1.7	1.1	10.6	900
09-11	.6	6.2		3.7		9.0	5.6	.6	1.1	2.0	9.2	900
12-14	.2	5.4	.1	3.8	.1	8.9	3.7	.6	1.0	1.4	6.6	900
15-17	.7	5.9	.1	2.8		8.0	3.8	1.0	1.2	1.4	7.4	900
18-20		7.6		3.0		9.8	3.7	.9	.8	1.8	7.1	900
21-23	.3	8.9	.3	3.2		11.6	3.3	.3	.7	.7	5.0	900
TOTALS	.4	6.9	.1	3.9	.0	10.0	4.6	.4	1.1	1.2	7.3	7200

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAY

HOURS (LST)	TSTMS	RAIN C/DRIZZLE	FRZING RAIN C/DRIZZLE	SNOW C/DRIZZLE	PAIL	% OBS WITH PRECIP	FOG	SMOKE C/DR HAZE	BLOWING SNOW	DUST C/DR SAND	% OBS W/OBST TO VISION	TOTAL OBS
00-02	.9	8.6	.1	1.0		9.7	3.8	.9		.3	4.7	930
03-05	.5	8.7		.9		9.6	6.0	.8		.1	6.8	930
06-08	.4	9.7		.5		10.2	7.0	1.2			8.2	930
09-11		7.8		.3		8.2	4.2	1.5		.1	5.8	930
12-14	.3	6.9		.3		7.0	2.7	1.1		.4	4.2	930
15-17	.9	8.3		.3		8.3	2.8	.8		.8	4.3	930
18-20	1.6	8.3		.3		8.3	2.5	1.5		1.5	5.3	930
21-23	1.8	8.9		1.0		9.6	1.9	.9		.4	3.2	930
TOTALS	.8	8.4	.0	.6		8.9	3.9	1.1		.5	5.3	7440

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUN

HOURS (LST)	TSTMS	RAIN C/DRIZZLE	FRZING RAIN C/DRIZZLE	SNOW C/DR SLEET	PAIL	% OBS WITH PRECIP	FOG	SMOKE C/DR HAZE	BLOWING SNOW	DUST C/DR SAND	% OBS W/OBST TO VISION	TOTAL OBS
00-02	2.3	8.7				8.7	2.6	.2		.2	3.0	900
03-05	2.1	7.3				7.3	5.3	.2			5.6	900
06-08	1.4	8.4				8.4	5.9	1.0			6.9	900
09-11	.7	10.4				10.4	3.6	1.1		.2	4.9	900
12-14	1.0	6.9				6.9	3.0	.3		.1	3.4	900
15-17	1.4	6.9				6.9	2.2	.8		.4	3.4	900
18-20	1.2	5.1				5.1	1.9	.2		.7	2.8	900
21-23	2.9	8.1				8.1	1.7			.4	2.1	900
TOTALS	1.6	7.7				7.7	3.3	.5		.3	4.0	7200

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUL

HOURS (LST)	TSTMS	RAIN C/OR DRIZZLE	FRZING RAIN C/OR DRIZZLE	SNOW C/OR SLEET	HAIL	3 OBS WITH PRECIP	FOG	SMOKE C/OR HAZE	BLOWING SNOW	DUST C/OR SAND	3 OBS W/OBS TO VISION	TOTAL OBS
00-02	3.9	4.7			.1	4.7	2.3	.5			2.8	930
03-05	3.9	7.3				7.3	5.3	.4			5.7	930
06-08	1.4	5.7				5.7	7.3	.4			7.7	930
09-11	1.1	4.7				4.7	1.7	.6			2.4	930
12-14	.9	4.4				4.4	1.2	.3			1.5	930
15-17	1.6	3.1				3.1	.2	.5			.8	930
18-20	4.1	6.3			.1	6.3	.4	.4			.9	927
21-23	5.2	6.0				6.0	.6	.3			1.0	927
TOTALS	2.8	5.3			.0	5.3	2.4	.4			2.9	7434

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG

HOURS (LST)	TSTMS	RAIN C/OR DRIZZLE	FRZING RAIN C/OR DRIZZLE	SNOW C/OR SLEET	HAIL	3 OBS WITH PRECIP	FOG	SMOKE C/OR HAZE	BLOWING SNOW	DUST C/OR SAND	3 OBS W/OBS TO VISION	TOTAL OBS
00-02	3.4	6.5				6.5	2.9	.5			3.4	930
03-05	2.5	7.4				7.4	6.7	.8			7.3	930
06-08	1.5	6.9				6.9	12.2	.6			12.8	930
09-11	1.1	6.9				6.9	5.5	2.2			7.6	930
12-14	1.2	6.3				6.3	1.9	2.2			4.1	930
15-17	1.6	7.1				7.1	.6	1.6			2.3	930
18-20	2.9	4.1				4.1	.5	1.8			2.4	930
21-23	2.8	4.9				4.9	1.5	.6			2.2	930
TOTALS	2.1	6.3				6.3	4.0	1.3			5.3	7440

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: SEP

POHRS (LST)	TSNHS	RAIN E/OR DRIZZLE	FRZING RAIN E/OR DRIZZLE	SNOW E/OR SLEET	HAIR	% OBS WITH PRECIP	FOG	SMOKE E/OR HAZE	BLOWING SNOW	DUST E/OR SAND	% OBS W/OBST TO VISION	TOTAL OBS
00-02	1.0	6.3		.1		6.3	4.0				4.0	900
03-05	.9	6.3		.3		6.7	4.0				4.0	900
06-08	1.0	7.8		.8		8.4	7.6	1.2			8.8	900
09-11	.4	10.0		.3		10.1	5.6	1.7			7.2	900
12-14	.8	9.3		.3		9.7	4.4	.9		.1	5.4	900
15-17	1.0	8.8				8.8	3.7	2.0		.6	6.2	900
18-20	.2	8.1				8.1	3.4	.8		.1	4.3	900
21-23	.3	7.7		.1		7.7	4.1	.1			4.2	900
TOTALS	.7	8.0		.2		8.2	4.6	.8		.1	5.5	7200

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: OCT

POHRS (LST)	TSNHS	RAIN E/OR DRIZZLE	FRZING RAIN E/OR DRIZZLE	SNOW E/OR SLEET	HAIR	% OBS WITH PRECIP	FOG	SMOKE E/OR HAZE	BLOWING SNOW	DUST E/OR SAND	% OBS W/OBST TO VISION	TOTAL OBS
00-02	.2	10.1		2.8		11.8	5.3				5.3	930
03-05	.2	9.6		3.1		12.2	5.6				5.6	930
06-08	.1	11.0		3.0		13.3	9.9	.2	.2		10.3	930
09-11		9.1		2.8		11.0	10.6	1.3	.3		12.2	930
12-14		8.8		3.4		11.1	6.2	1.4	.4	.1	8.2	930
15-17	.4	8.6		1.1		10.6	6.5	1.3	.3	.3	8.4	930
18-20	.2	9.9		3.1		12.3	6.2	1.0	.2		7.4	930
21-23		9.0		2.6		11.1	5.2	.1			5.3	930
TOTALS	.1	9.5		3.0		11.7	6.9	.7	.2	.1	7.8	7440

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV

HOURS (LST)	TSTMS	RAIN E/OR DRIZZLE	FRZING RAIN E/OR DRIZZLE	SNOW E/OR SLEET	HAIL	% OBS WITH PRECIP	FOG	SMOKE E/OR HAZE	BLOWING SNOW	DUST E/OR SAND	% OBS W/OBST TO VISION	TOTAL OBS
00-02		2.8	.4	15.6		18.2	7.3		3.1		10.4	900
03-05		2.9	.2	16.2		18.8	9.4		3.6		13.0	900
06-08		3.0	.6	15.1		18.6	11.2		5.0		16.2	900
09-11		2.6	.9	14.2		17.3	14.9	.1	4.7		19.4	900
12-14		1.9	.3	13.9		15.4	9.4	.1	4.3		13.8	900
15-17		1.8		16.3		17.7	7.6	1.1	4.2		12.8	900
18-20		2.1	.8	15.1		17.4	6.1	.2	3.8		10.1	900
21-23		2.1	.9	16.7		19.1	7.0		3.4	.1	10.6	900
TOTALS		2.4	.5	15.4		17.8	9.1	.2	4.0	.0	13.3	7200

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC

HOURS (LST)	TSTMS	RAIN E/OR DRIZZLE	FRZING RAIN E/OR DRIZZLE	SNOW E/OR SLEET	HAIL	% OBS WITH PRECIP	FOG	SMOKE E/OR HAZE	BLOWING SNOW	DUST E/OR SAND	% OBS W/OBST TO VISION	TOTAL OBS
00-02	.1	.9	1.8	17.6		20.2	9.2	.1	3.3	.2	12.9	930
03-05		.5	2.2	18.4		21.0	7.7		4.1	.2	12.0	930
06-08	.1	.5	2.4	19.5		22.0	7.1		6.7	.1	13.9	930
09-11		.6	1.4	16.8		18.7	9.7		8.4	.3	18.4	930
12-14		.5	.9	17.5		18.9	10.5	.5	8.0	.8	19.8	930
15-17		.6	1.2	14.1		15.7	9.9	.6	7.3	.9	18.5	930
18-20		.6	.8	15.4		16.7	9.1	.4	5.9	.9	16.2	930
21-23		.4	1.6	18.4		20.0	8.9	.3	4.3	.1	13.7	930
TOTALS	.0	.6	1.5	17.2		19.2	9.0	.2	6.0	.4	15.7	7440

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-87  
MONTH: ALL

		HOURS (LST)	TSTMS	RAIN E/DR DRIZZLE	FRZING RAIN E/DR DRIZZLE	SNOW E/DR SLEET	HAIL	% OBS WITH PRECIP	FOG	SMOKE E/DR HAZE	BLOWING SNOW	DUST E/DR SAND	% OBS W/OBST TO VISION	TOTAL OBS
JAN	ALL		.1	.4	22.1			22.4	3.9	.5	9.7	.1	14.0	7440
FEB			.6	2.1	21.6			23.6	12.1	1.0	6.8	.1	19.7	6768
MAR			.0	4.1	.7	12.5		16.7	11.2	.6	3.7	.2	15.5	7440
APR			.4	6.9	.1	3.9	.0	10.0	4.6	.4	1.1	1.2	7.3	7200
MAY			.8	8.4	.0	.6		8.9	3.9	1.1		.5	5.3	7440
JUN			1.6	7.7				7.7	3.3	.5		.3	4.0	7200
JUL			2.8	5.3			.0	5.3	2.4	.4			2.9	7434
AUG			2.1	6.3				6.3	4.0	1.3			5.3	7440
SEP			.7	8.0		.2		8.2	4.6	.8		.1	5.5	7200
OCT			.1	9.5		3.0		11.7	6.9	.7	.2	.1	7.8	7440
NOV				2.4	.5	15.4		17.8	9.1	.2	4.0	.0	13.3	7200
DEC			.0	.6	1.5	17.2		19.2	9.0	.2	6.0	.4	15.7	7440
TOTALS			.7	5.0	.4	8.0	.0	13.2	6.3	.6	2.6	.3	9.7	87642

GLOBAL CLIMATOLOGY BRANCH  
SAFETAC  
IN WEATHER SERVICE/MAC

PERCENTAGE OF DAYS WITH VARIOUS ATMOSPHERIC PHENOMENA  
FROM DAILY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 59-87  
MONTH: ALL

MONTH	TSTMS	RAIN L/OR DRIZZLE	FRZING RAIN L/OR DRIZZLE	SNOW L/OR SLEET	HAIL	% OBS WITH PRECIP	FOG	SMOKE L/OR HAZE	BLOWING SNOW	DUST L/OR SAND	% OBS W/CHST TO VISION	TOTAL OBS
JAN		5.9	4.8	65.1		66.3	20.0	3.9	34.1	.7	48.2	867
FEB		10.2	8.3	59.8	.1	62.5	25.2	6.7	24.7	.6	45.6	781
MAR		16.7	5.4	46.0		54.3	29.6	5.9	14.6	.8	41.5	866
APR		33.6	2.0	20.0	.6	44.5	23.1	3.3	3.6	.1	26.3	640
MAY		44.6	.1	3.5	.8	46.3	20.2	2.5	.2		21.5	866
JUN		50.5			1.8	50.5	17.5	2.6			19.0	840
JUL		46.8			1.6	46.8	14.1	2.9			15.3	866
AUG		43.1			1.1	43.1	19.6	5.3			21.9	837
SEP		41.9		1.3	.4	42.4	19.2	4.0			20.4	826
OCT		35.3	.9	10.5	.1	39.5	21.3	4.3	1.2		22.8	866
NOV		18.4	5.5	41.7		50.7	23.9	3.7	9.2	.2	32.0	840
DEC		11.8	9.6	61.3		64.1	26.7	3.2	21.2		44.4	866
TOTALS		33.0	3.0	25.8	.5	50.9	21.7	4.0	9.1	.2	30.0	10171

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#### PRECIPITATION, SNOWFALL AND SNOW DEPTH SUMMARIES

##### PERCENTAGE FREQUENCY OF VARIOUS DAILY AMOUNTS OF PRECIPITATION (SNOWFALL AND SNOW DEPTH) SUMMARIES:

THESE SUMMARIES DERIVE FROM SUMMARY OF DAY DATA.

DATA IS SUMMARIZED MONTHLY AND ANNUALLY WITH ALL YEARS COMBINED.

DISPLAYED ARE: PERCENT OF DAYS WITH MEASURABLE AMOUNTS, A PERCENT OF DAYS WITH NO AMOUNTS, TRACES, GIVEN AMOUNTS, MEANS, GREATEST AMOUNTS AND LEAST AMOUNTS (THE STATISTICAL VALUES ARE NOT INCLUDED IN THE SNOW DEPTH SUMMARY BECAUSE OF THEIR DOUBTFUL AND LIMITED VALUE).

ALSO PROVIDED ARE THE OBSERVATION COUNTS.

A VALUE OF ".0" IN THESE TABLES INDICATES LESS THAN .05% WHICH USUALLY INDICATES ONLY ONE OCCURRENCE.

##### EXTREME DAILY AMOUNTS OF PRECIPITATION (SNOWFALL AND SNOW DEPTH) SUMMARIES

DATA DERIVED FROM SUMMARY OF DAY DATA

PRESENTED ARE THE EXTREME DAILY AMOUNTS OF PRECIPITATION, SNOWFALL AND SNOW DEPTH BY INDIVIDUAL MONTH AND YEAR.

ALSO PRESENTED ARE THE MEANS, STANDARD DEVIATIONS AND TOTAL OBSERVATIONS COUNTS.

AN ASTERISK "\*" PRINTED IN THE TABLES INDICATES THAT THE EXTREME VALUE FOR THAT YEAR AND MONTH DERIVES FROM AN INCOMPLETE MONTH (AT LEAST ONE DAY OF THE MONTH IS MISSING).

WHEN A MONTH HAS VALID OBSERVATIONS REPORTED BUT NO OCCURRENCES, ZEROS ARE DISPLAYED IN THE TABLES:

EXTREME DAILY PRECIPITATION: ".00" EQUALS NONE FOR THE MONTH (HUNDREDTHS)

EXTREME DAILY SNOWFALL: ".0" EQUALS NONE FOR THE MONTH (TENTHS)

EXTREME DAILY SNOW DEPTH: "0" EQUALS NONE FOR THE MONTH (WHOLE INCHES)

##### TOTAL MONTHLY AMOUNTS OF PRECIPITATION AND SNOWFALL SUMMARIES

DATA DERIVED FROM SUMMARY OF DAY DATA.

DATA PRESENTED BY YEAR AND MONTH.

ALSO PRESENTED ARE THE MEANS, STANDARD DEVIATIONS AND TOTAL OBSERVATION COUNTS.

AN ASTERISK "\*" IN THE TABLES INDICATES THAT ONE OR MORE DAYS WERE MISSING FOR THE MONTH.

NO OCCURRENCES FOR THE MONTH ARE INDICATED BY ZEROS.

IF THE AMOUNT IS A TRACE, THEN "TRACE" IS PRINTED IN THE TABLES.

STATISTICAL VALUES DO NOT INCLUDE MEASUREMENTS FROM INCOMPLETE MONTHS.

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF PRECIPITATION  
FROM SUMMARY OF DAY DATA

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 59-87

AMOUNTS IN INCHES

MONTH	NONE	TRACE	.01	.02	.06	.11	.26	.51	1.01	2.51	5.01	10.01	OVER	3 DAYS WITH MEAS AMTS	TOTAL OBS	MONTHLY AMOUNTS		
				TO .05	TO .10	TO .25	TO .50	TO 1.00	TO 2.50	TO 5.00	TO 10.00	TO 20.00	20.00			MEAN	GREATEST	LEAST
JAN	33.5	40.4	5.3	9.0	5.8	4.3	1.5	.2						26.1	866	.66	2.43	.10
FEB	37.2	38.2	5.2	8.3	5.4	4.2	.9	.6						24.7	791	.57	3.21	.07
MAR	45.7	30.3	3.6	8.9	2.4	5.9	1.7	1.3	.2					24.0	866	1.02	2.92	.04
APR	55.2	19.5	2.1	7.3	3.8	5.2	3.6	2.6	.6					25.2	840	1.60	4.02	TRACE
MAY	53.3	16.4	3.0	6.2	4.5	7.4	5.0	3.1	1.0	.1				30.3	868	2.46	7.83	.47
JUN	49.2	16.9	2.4	7.0	6.4	6.0	5.8	4.3	2.0					33.9	840	2.95	8.10	.79
JUL	52.4	13.9	2.9	8.1	3.9	7.8	5.5	3.7	1.7					33.6	868	2.86	6.73	.74
AUG	56.4	14.3	3.5	5.9	3.0	6.8	5.5	3.0	1.6	.1				29.3	837	2.47	5.50	.35
SEP	57.4	16.4	3.7	5.6	3.7	4.4	3.6	2.8	2.2	.1				26.1	827	2.45	6.21	.27
OCT	60.3	17.3	1.8	6.6	3.2	4.8	2.9	2.2	.9					22.5	868	1.56	5.71	.16
NOV	48.6	30.6	4.4	6.8	3.8	3.1	1.7	.8	.2					20.8	840	.77	3.33	.02
DEC	35.9	40.0	4.4	8.8	5.2	4.4	.9	.5						24.1	867	.63	1.35	.11
ANN	48.8	24.5	3.5	7.4	4.3	5.4	3.2	2.1	.9	.0				26.7	10178	21.00		

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

EXTREME VALUES OF PRECIPITATION  
(FROM DAILY OBSERVATIONS)

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 59-87

YEAR	24 HOUR AMOUNTS IN INCHES -M-O-N-T-H-S-												ALL MONTHS
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
59									.20	.64	.36	.18	
60	.39	.18	.10	.41	.71	1.06	.50	1.01	.39	.60	.08	.71	1.06
61	.17	.14	.14	.41	.36	.58	.51	.25	1.38	.71	.48	.14	1.38
62	.16	.41	.25	.13	3.06	.56	.33	.47	2.11	.26	.64	.22	3.06
63	.06	.20	.14	.47	.28	.53	1.38	.35	.11	.23	.09	.71	1.38
64	.23	.10	.28	1.00	.44	2.25	.76	1.31	2.06	.11	.36	.56	2.25
65	.11	.06	.25	.70	1.25	1.31	1.12	.78	1.50	.32	.37	.11	1.50
66	.29	.18	1.16	.44	.58	1.14	1.46	1.17	.23	.58	.21	.29	1.46
67	.85	.13	.20	1.13	.39	.84	.66	.24	1.13	.56	.05	.23	1.13
68	.13	.02	.10	1.18	.58	1.68	1.32	1.15	.64	.33	.10	.15	1.68
69	.23	.30	.07	.47	.76	2.02	.28	.64	1.77	.76	.07	.14	2.02
70	.15	.05	.31	1.22	1.20	.86	1.36	1.28	2.14	.64	.94	.25	2.14
71	.56	.09	.44	.73	.88	.82	2.34	2.91	.58	1.14	.20	.06	2.91
72	.07	.09	.20	1.06	.57	.67	.36	.63	1.11	.20	.04	.25	1.11
73	.04	.06	.76	.17	1.47	.71	.30	.47	1.57	.84	.24	.09	1.57
74	.12	.17	.16	1.09	.72	.53	.50	1.45	.49	.32	.52	.26	1.45
75	.06	.22	.73	.78	.82	1.30	.43	.54	.85	.52	.19	.25	1.30
76	.45	.55	.75	.59	.10	.71	1.73	.39	.30	.09	.01	.14	1.73
77	.15	.53	.60	.35	1.43	.52	.63	.47	1.05	1.14	1.12	.22	1.43
78	.07	.10	.20	.30	.76	.44	.60	1.20	1.45	.13	.23	.43	1.45
79	.40	.73	.62	.98	.82	1.62	2.32	.54	.59	.60	.13	.11	2.32
80	.18	.14	.47	TRACE	.35	.67	.59	1.01	.80	.58	.36	.07	1.01
81	.04	.37	.22	.55	1.31	1.50	.94	.95	2.80	1.65	.23	.04	2.80
82	.40	.15	.65	.13	.54	1.08	1.03	.69	.86	1.85	.35	.38	1.08
83	.28	.17	.70	.14	.50	.80	1.98	1.43	1.31	.62	.53	.19	1.98
84	.40	.20	.39	.90	.48	2.25	.72	.56	.13	1.71	.22	.30	2.25
85	.14	.31	.95	.26	2.22	.78	.26	2.21	.37	1.32	.39	.58	2.22
86	.26	.12	.02	.98	.66	.43	.91	.45	.85	.15	1.40	.16	1.40
87	.15	.58	.24	.24	1.99	.85	2.17						
MEAN	.240	.227	.407	.600	.904	1.018	.982	.909	1.058	.664	.354	.262	1.785
S.D.	.188	.182	.295	.374	.653	.535	.644	.609	.698	.493	.331	.187	.592
TOTAL OBS	866	791	866	840	868	840	868	837	827	866	840	867	10178

NOTE \* (BASED ON LESS THAN FULL MONTHS)

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

MONTHLY PRECIPITATION  
(FROM DAILY OBSERVATIONS)

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 59-87

TOTAL MONTHLY PRECIPITATION IN INCHES													
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ALL MONTHS
59													
60	.52	.36	.13	1.24	2.48	3.32	.74	3.03	.44	2.15	1.44	.23	15.62
61	.35	.49	.31	1.03	.72	1.48	2.12	.45	4.41	1.74	.59	.40	14.09
62	.77	.86	1.05	.44	7.83	1.79	1.64	1.12	3.31	.28	.86	.42	20.37
63	.10	.37	.34	1.35	1.05	1.48	4.13	.51	.27	.24	.20	1.24	11.28
64	.32	.22	.78	3.44	.81	8.10	2.89	2.65	3.45	.23	.45	1.32	24.66
65	.23	.11	.80	2.26	5.05	3.47	3.61	2.03	6.21	1.10	1.41	.37	26.65
66	.79	.30	2.92	1.31	1.00	3.55	6.06	3.34	.48	1.22	.42	.76	22.15
67	2.43	.28	.56	4.02	.47	2.83	1.07	.35	1.99	1.69	.17	.72	16.58
68	.49	.15	.57	2.71	2.12	5.54	4.11	3.49	2.01	.67	.25	.70	*23.01
69	*1.38	.85	.15	.56	2.11	4.72	1.71	1.01	5.00	1.16	.12	*.60	*19.37
70	.47	.18	1.05	2.82	4.32	2.90	4.20	2.03	3.18	1.44	1.20	.98	24.77
71	.80	.10	1.06	.97	2.15	3.81	5.71	4.67	2.24	3.58	.27	.19	25.55
72	.18	.31	.70	2.07	1.08	1.23	1.30	2.03	2.46	.35	.08	.56	12.35
73	.10	.07	1.04	.37	3.22	2.10	.74	1.43	3.98	1.95	.66	.43	16.09
74	.39	.45	.53	2.87	3.96	1.38	2.21	4.31	.83	1.10	.57	.47	18.99
75	*.26	.62	2.10	2.75	1.27	4.86	1.62	1.81	1.00	1.58	.41	.44	*18.72
76	1.28	1.00	1.63	1.19	.60	3.09	2.37	1.69	.53	.16	.02	.57	14.13
77	.62	.94	1.90	.73	4.36	1.89	3.15	2.83	3.30	1.51	3.33	1.26	25.82
78	.22	.37	.25	.82	2.49	1.08	1.80	4.06	2.78	.34	.84	.99	16.04
79	1.56	3.21	2.05	3.71	2.03	3.08	4.60	1.07	.85	.84	.21	.11	23.32
80	.81	.80	.65	TRACE	.77	1.30	1.95	4.30	2.37	1.15	.96	.19	15.25
81	.13	.61	.36	.65	2.33	4.19	1.77	3.01	5.35	3.07	.47	.13	22.07
82	1.45	.42	1.01	.38	3.30	3.37	3.27	1.76	1.65	5.71	.66	.61	23.59
83	.43	.38	2.01	.31	1.50	3.02	3.59	5.03	3.99	1.79	1.30	.61	23.96
84	.76	.46	.95	2.33	.88	4.68	1.95	1.24	.42	4.61	.47	.71	19.46
85	.71	.48	2.28	.47	4.84	1.36	.87	5.50	.71	2.38	1.36	.96	21.92
86	.85	.48	.04	3.66	1.79	.79	4.03	1.77	2.66	.25	2.62	.30	19.24
87	.36	1.21	.94	.33	4.43	2.40	6.73						
MEAN	.658	.579	1.022	1.600	2.463	2.955	2.855	2.471	2.455	1.557	.773	.630	19.748
S.D.	.533	.593	.756	1.229	1.759	1.646	1.635	1.473	1.654	1.336	.758	.373	4.636
TOTAL OBS	866	791	866	840	868	840	868	837	827	868	840	867	10178

NOTE \* (BASED ON LESS THAN FULL MONTHS)

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SNOWFALL  
FROM SUMMARY OF DAY DATA

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 59-87

MONTH	AMOUNTS IN INCHES														8 DAYS WITH MEAS AMTS	TOTAL OBS	MONTHLY AMOUNTS		
	NONE	TRACE	0.1	0.5	1.5	2.5	3.5	4.5	6.5	10.5	15.5	25.5	OVER	MEAN			GREATEST	LEAST	
			TO 0.4	TO 1.4	TO 2.4	TO 3.4	TO 4.4	TO 6.4	TO 10.4	TO 15.4	TO 25.4	TO 50.4	50.4						
JAN	34.6	39.0	11.7	9.4	2.5	1.5	.5	.8						26.3	866	7.5	21.1	1.1	
FEB	39.6	35.8	12.3	8.1	2.7	.8	.1	.6	.1					24.7	791	6.1	32.9	1.3	
MAR	53.9	26.8	9.6	4.1	2.6	.8	.9	.6	.5	.1				19.2	868	7.7	26.0	TRACE	
APR	80.1	11.4	2.7	3.0	1.2	1.0	.1	.2	.2					8.5	890	3.5	14.5	TRACE	
MAY	96.7	2.4	.3	.3		.2								.9	868	.3	4.4	.0	
JUN	100.0														862	.0	.0	.0	
JUL	100.0														890	.0	.0	.0	
AUG	100.0														862	.0	.0	.0	
SEP	98.7	1.1		.1	.1									.2	890	.1	1.5	.0	
OCT	89.5	7.6	.5	1.2	.7	.1	.1	.3						2.9	868	1.6	7.6	.0	
NOV	58.1	25.0	7.0	5.0	1.9	1.5	.5	.7	.2					16.9	890	6.5	22.8	.1	
DEC	38.6	39.0	10.3	7.5	3.0	.8	.3	.2	.2					22.4	867	6.4	15.4	.2	
ANN	74.1	15.7	4.5	3.2	1.2	.6	.2	.3	.1	.0				10.2	10262	35.7			

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

EXTREME VALUES OF SNOWFALL  
(FROM DAILY OBSERVATIONS)

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 59-87

YEAR	24 HOUR AMOUNTS IN INCHES												ALL MONTHS
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
59						.0	.0	.0	TRACE	4.1	3.9	.2	
60	4.6	2.3	.1	4.5	1	.0	.0	.0	.0	TRACE	.8	7.1	7.1
61	1.7	1.4	1.4	.5	TRACE	.0	.0	.0	TRACE	TRACE	2.6	.7	2.6
62	1.9	4.1	2.3	1.0	.0	.0	.0	.0	.0	TRACE	5.4	2.2	5.4
63	.7	2.0	1.6	2.0	TRACE	.0	.0	.0	.0	.0	1.6	7.2	7.2
64	3.2	1.1	2.8	3.6	.0	.0	.0	.0	TRACE	TRACE	4.3	5.6	5.6
65	1.1	.6	2.5	7.0	2.5	.0	.0	.0	TRACE	.0	3.5	1.0	7.0
66	2.4	1.8	11.6	2.9	TRACE	.0	.0	.0	.0	TRACE	2.1	3.9	11.6
67	4.5	1.3	2.0	4.6	3.4	.0	.0	.0	.0	1.0	.4	1.1	4.6
68	1.4	.4	1.8	1.2	TRACE	.0	.0	.0	.0	2.2	1.0	1.6	2.2
69	2.0	3.0	.7	TRACE	.0	.0	.0	.0	.0	1.1	.2	1.4	3.0
70	1.5	.5	3.1	9.7	TRACE	.0	.0	.0	.0	TRACE	1.1	2.5	9.7
71	4.0	1.7	4.0	.5	TRACE	.0	.0	.0	.0	4.7	1.0	2.0	4.7
72	3.2	1.6	5.2	3.0	TRACE	.0	.0	.0	1.5	1.7	1.4	4.3	5.2
73	.6	.9	1.6	.7	.0	.0	.0	.0	.0	.0	3.1	1.9	3.1
74	3.1	4.5	1.2	.5	TRACE	.0	.0	.0	TRACE	.7	6.1	2.8	6.1
75	5.0	2.3	7.0	3.0	.0	.0	.0	.0	.0	TRACE	5.5	3.0	7.0
76	4.5	5.0	6.0	TRACE	TRACE	.0	.0	.0	.0	.3	.1	1.6	6.0
77	2.0	5.5	2.1	1.0	.0	.0	.0	.0	.0	.3	8.0	4.0	8.0
78	1.7	2.4	2.0	3.1	.0	.0	.0	.0	.0	TRACE	3.0	4.6	4.6
79	4.0	7.3	5.5	1.8	.6	.0	.0	.0	.0	3.1	1.3	1.1	7.3
80	6.0	1.5	4.7	TRACE	.0	.0	.0	.0	.0	.6	2.9	2.0	6.0
81	1.0	1.5	TRACE	TRACE	TRACE	.0	.0	.0	.0	2.0	2.0	.4	2.0
82	6.0	2.0	1.8	.8	.0	.0	.0	.0	.0	TRACE	3.1	.6	6.0
83	2.8	1.5	2.7	1.0	.4	.0	.0	.0	.0	6.2	5.3	1.9	6.2
84	3.0	2.7	2.1	.2	.0	.0	.0	.0	.7	.7	2.2	3.0	3.0
85	1.4	.5	9.5	TRACE	.0	.0	.0	.0	TRACE	6.1	8.7	2.0	9.5
86	3.1	1.2	.2	2.3	.0	.0	.0	.0	.0	TRACE	6.0	1.6	6.0
87	1.5	6.3	3.1	TRACE	.0	.0	.0	.0	.0	.0	.0	.0	
MEAN	2.73	2.39	3.16	1.96	.25	.00	.00	.00	.08	1.24	3.09	2.59	5.87
S.D.	1.543	1.822	2.743	2.315	.784	.000	.000	.000	.308	1.889	2.321	1.879	2.349
TOTAL OBS	866	791	868	840	868	862	890	862	840	868	840	867	10262

NOTE \* (BASED ON LESS THAN FULL MONTHS)

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

MONTHLY SNOWFALL  
(FROM DAILY OBSERVATIONS)

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 59-87

TOTAL MONTHLY SNOWFALL IN INCHES													
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ALL MONTHS
59						0.0	0.0	0.0	TRACE	7.0	12.6	.2	
60	6.0	4.0	.3	8.2	.1	.0	.0	.0	.0	TRACE	2.8	13.4	34.8
61	3.4	5.0	1.8	.8	TRACE	.0	.0	.0	TRACE	3.6	2.5	17.1	
62	8.2	8.7	10.3	1.4	.0	.0	.0	.0	.0	TRACE	7.2	3.7	39.5
63	1.1	3.7	3.6	4.2	TRACE	.0	.0	.0	.0	.0	1.8	12.7	27.1
64	4.2	3.1	7.6	8.8	.0	.0	.0	.0	TRACE	TRACE	5.1	14.0	42.8
65	2.6	1.3	8.9	7.6	2.5	.0	.0	.0	TRACE	.0	13.4	2.9	39.2
66	7.2	2.7	26.0	9.0	TRACE	.0	.0	.0	.0	TRACE	4.0	8.5	57.4
67	21.1	2.8	4.9	5.9	4.4	.0	.0	.0	.0	1.0	1.1	4.3	45.5
68	4.8	1.5	1.8	2.6	TRACE	.0	.0	.0	.0	2.2	2.4	6.8	22.1
69	13.4	8.1	1.5	TRACE	.0	.0	.0	.0	.0	1.6	.5	46.0	31.1
70	4.7	1.8	9.4	14.5	TRACE	.0	.0	.0	.0	TRACE	3.0	10.6	44.0
71	7.0	2.1	9.0	.7	TRACE	.0	.0	.0	.0	5.1	1.8	4.7	30.4
72	5.9	6.1	10.5	9.1	TRACE	.0	.0	.0	1.5	2.4	1.5	7.6	44.6
73	1.6	1.4	2.7	.7	.0	.0	.0	.0	.0	.0	8.7	6.5	21.6
74	8.5	10.0	4.1	.5	TRACE	.0	.0	.0	TRACE	.7	6.5	6.2	36.5
75	7.8	7.8	20.4	5.6	.0	.0	.0	.0	.0	TRACE	8.3	5.3	55.2
76	13.8	8.7	18.0	TRACE	TRACE	.0	.0	.0	.0	.3	.1	6.6	47.5
77	7.5	9.2	6.5	1.0	.0	.0	.0	.0	.0	.3	22.8	15.4	62.7
78	3.4	5.8	2.8	3.1	.0	.0	.0	.0	.0	TRACE	12.8	10.2	38.1
79	17.1	32.9	13.7	7.2	1.6	.0	.0	.0	.0	3.1	3.3	1.1	80.0
80	14.3	9.1	8.5	TRACE	.0	.0	.0	.0	.0	1.2	5.7	3.6	42.4
81	1.9	4.0	TRACE	TRACE	TRACE	.0	.0	.0	.0	4.1	2.5	1.3	13.8
82	18.8	5.1	4.3	.8	.0	.0	.0	.0	.0	TRACE	5.0	1.5	35.5
83	4.6	2.7	4.1	1.0	.4	.0	.0	.0	.0	6.2	12.9	6.1	38.0
84	7.9	4.6	4.8	.2	.0	.0	.0	.0	.7	1.3	3.2	7.1	29.8
85	6.8	1.7	24.1	TRACE	.0	.0	.0	.0	TRACE	7.6	19.3	5.8	65.3
86	8.9	4.3	.3	3.8	.0	.0	.0	.0	.0	TRACE	9.9	3.1	30.3
87	3.3	11.9	5.7	TRACE	.0	.0	.0						
PEAN	7.48	6.08	7.70	3.45	.32	.00	.00	.00	.08	1.58	6.49	6.36	39.44
S.D.	5.355	4.080	7.019	3.923	.971	.000	.000	.000	.308	2.326	5.741	4.137	15.251
TOTAL OBS	866	791	868	840	868	862	890	862	840	868	840	867	10262

NOTE \* (BASED ON LESS THAN FULL MONTHS)

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SNOW DEPTH  
FROM SUMMARY OF DAY DATA

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 59-87

MONTH	AMOUNTS IN INCHES														2 DAYS WITH MEAS AMTS	TOTAL OBS	MONTHLY AMOUNTS		
	NONE	TRACE	1	2	3	4 TO 6	7 TO 12	13 TO 24	25 TO 36	37 TO 48	49 TO 60	61 TO 120	OVER 120				MEAN	GREATEST	LEAST
JAN	1.7	3.6	9.7	4.7	12.6	22.0	32.4	12.9	.3						94.7	867			
FEB	3.2	4.9	13.3	11.4	5.6	19.0	25.8	14.8	2.1						91.9	791			
MAR	17.2	17.3	11.8	7.6	6.8	16.7	15.7	5.5	1.5						65.6	868			
APR	73.5	11.8	4.5	1.9	1.9	4.6	1.3	.5							14.8	840			
MAY	99.0	.5	.3	.1	.1										.6	868			
JUN	100.0															862			
JUL	100.0															890			
AUG	100.0															862			
SEP	99.8		.2												.2	840			
OCT	95.0	2.5	.9	.8	.5	.2									2.4	867			
NOV	51.1	16.1	9.2	9.3	3.3	6.8	2.5	1.8							32.9	840			
DEC	9.9	12.3	15.1	15.8	10.0	17.7	14.1	5.1							77.8	868			
ANN	62.5	5.7	5.4	4.3	3.4	7.2	7.6	3.4	.3						31.7	10263			



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

EXTREME VALUES OF SNOW DEPTH  
(FROM DAILY OBSERVATIONS)

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 59-87

DAILY SNOW DEPTH IN INCHES													
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ALL MONTHS
59						0	0	0	0	3	7	2	
60	5	4	2	5	0	0	0	0	0	TRACE	4	8	8
61	8	5	1	TRACE	TRACE	0	0	0	0	0	3	6	8
62	9	9	13	7	0	0	0	0	0	TRACE	5	4	13
63	3	2	2	1	TRACE	0	0	0	0	0	2	9	9
64	3	2	7	5	0	0	0	0	0	0	4	16	16
65	18	17	9	7	0	0	0	0	0	0	8	7	18
66	9	9	30	6	1	0	0	0	0	0	3	7	30
67	22	21	10	4	3	0	0	0	0	1	0	5	22
68	8	5	2	1	0	0	0	0	0	2	2	6	8
69	*17	20	20	7	0	0	0	0	0	*1	0	8	20
70	12	13	9	6	0	0	0	0	0	0	4	9	13
71	13	12	5	1	0	0	0	0	0	5	5	3	13
72	4	4	9	6	0	0	0	0	1	3	2	9	9
73	9	1	1	1	0	0	0	0	0	0	6	9	9
74	14	18	14	6	TRACE	0	0	0	0	TRACE	4	6	18
75	6	11	19	17	0	0	0	0	0	0	5	3	19
76	9	9	13	0	0	0	0	0	0	TRACE	TRACE	4	13
77	8	8	7	1	0	0	0	0	0	0	19	18	19
78	15	12	13	3	0	0	0	0	0	0	6	11	15
79	26	36	33	6	1	0	0	0	0	0	2	1	36
80	9	9	11	0	0	0	0	0	0	TRACE	3	2	11
81	1	2	2	0	0	0	0	0	0	2	2	3	3
82	18	16	9	1	0	0	0	0	0	0	2	2	18
83	4	2	2	TRACE	0	0	0	0	0	4	7	7	7
84	6	6	4	TRACE	0	0	0	0	1	TRACE	2	4	6
85	6	6	10	3	0	0	0	0	0	3	20	17	20
86	17	11	5	2	0	0	0	0	0	0	7	4	17
87	5	6	13	TRACE	0	0	0						
MEAN	9.9	9.9	9.8	3.4	.2	.0	.0	.0	.1	.9	4.8	6.8	14.5
S.D.	6.191	7.648	8.056	3.756	.612	.000	.000	.000	.262	1.486	4.701	4.459	7.415
TOTAL OBS	867	791	868	840	868	862	890	862	840	867	840	868	10263

NOTE \* (BASED ON LESS THAN FULL MONTHS)

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## **SURFACE WIND SUMMARIES**

### **EXTREME VALUES OF PEAK WINDS**

DATA DERIVED FROM SUMMARY OF DAY DATA.

VALUES PRESENTED BY INDIVIDUAL MONTH AND YEAR WITH ALL YEARS COMBINED.

SPEEDS PRESENTED IN KNOTS.

DIRECTIONS PRESENTED IN 16 COMPASS POINTS FROM BEGINNING OF PERIOD OF RECORD THROUGH JUNE 1968.  
COMMENCING JULY 1968 DIRECTIONS PRESENTED IN TENS OF DEGREES.

AN ASTERISK "\*" IN THE TABLES INDICATES THAT THE VALUE IS BASED ON AN INCOMPLETE MONTH OF THREE OR MORE MISSING DAYS.

MEANS AND STANDARD DEVIATIONS PRESENTED DO NOT INCLUDE INCOMPLETE MONTHS. FOUR OR MORE MONTHS ARE NEEDED TO COMPUTE THESE STATISTICS AND INCOMPLETE MONTHS ARE NOT INCLUDED.

TABLES ALSO INCLUDE THE OBSERVATION COUNTS.

### **BIVARIATE PERCENTAGE FREQUENCY TABULATIONS OF SURFACE WINDS**

DATA DERIVED FROM HOURLY DATA.

PRESENTED ARE THE PERCENTAGE FREQUENCY OF WIND DIRECTION TO 16 COMPASS POINTS, CALM AND VARIABLE VERSUS WIND SPEED IN KNOTS IN INCREMENTS OF BEAUFORT CLASSIFICATIONS.

PERCENTAGES ARE SHOWN BY BOTH DIRECTIONS AND SPEED, AND IN ADDITION THE MEAN WIND SPEED IN GIVEN FOR EACH DIRECTION.

DATA PRESENTED BY THE STANDARD 3-HOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED)..

A SEPARATE ANNUAL TABLE PRESENTS THE SAME BIVARIATE DISTRIBUTIONS WITH IMPOSED CEILING/VISIBILITY LIMITATIONS: WHEN VISIBILITIES EQUAL TO OR GREATER THAN 1/2 MILES, THE CEILINGS ARE 200 TO 1400 FEET AND/OR WHEN THE CEILING IS EQUAL TO OR GREATER THAN 200 FEET, THE VISIBILITIES ARE 1/2 THROUGH 2 1/2 MILES.

A PERCENTAGE VALUE OF ".0" IN THESE TABLES INDICATES ONE OR MORE OCCURRENCES AMOUNTING TO LESS THAN .05%.

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

EXTREME VALUES OF SURFACE WINDS  
(FROM DAILY OBSERVATIONS)

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 60-87

YEAR	DAILY PEAK GUSTS IN KNOTS												ALL MONTHS
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	
60		W 50	N 41	N 39	SSE 36	SSW 41	N 40	SSW 34	N 30	NNW 34	NNW 46	NNW 35	
61	NNW 36	NNW 34	NNW 38	NNW 39	S 37	N 33	NNW 42	S 32	WSW 42	NNW 39	NNW 38	SSE 32	NNW 42
62	SSW 35	NNW 44	NNW 33	S 37	S 46	SE 33	N 31	W 43	S 30	NNW 36	NNW 37	NNW 51	NNW 51
63	NNW 47	NW 37	NNW 46	NNW 47	NNW 41	WSW 37	SE 38	N 33	N 35	SW 41	SSE 32	NNW 46	NNW 47
64	NNW 39	NNW 45	NNW 44	NNW 62	ESE 48	NNW 46	NNW 45	NNW 41	NNW 59	W 48	W 35	SSE 35	NNW 62
65	NNW 40	NNW 57	NNW 43	NNW 43	NNW 45	W 41	NW 37	E 33	WSW 38	NNW 43	NNW 42	NNW 36	NNW 57
66	W 42	W 37	NNW 43	NNW 43	SW 55	SSE 42	NNW 53	W 38	NNW 39	NNW 50	NNW 30	SSE 39	NNW 63
67	NNW 51	N 41	SW 48	NNW 47	N 44	W 36	NNW 48	NNW 32	S 37	W 47	NNW 42	N 39	NNW 51
68	SSE 50	NW 45	NNW 44	N 43	NNW 38	W 32	34/ 52	34/ 42	27/ 48	33/ 51	27/ 36	34/ 50	34/ 52
69	31/ 37	29/ 40	36/ 37	32/ 34	27/ 39	1/ 36	32/ 29	20/ 51	18/ 43	11/ 30	28/ 38	16/ 31	20/ 51
70	27/ 37	35/ 43	34/ 37	29/ 55	18/ 43	16/ 40	24/ 40	27/ 38	24/ 45	32/ 39	14/ 45	27/ 44	29/ 55
71	35/ 36	34/ 39	32/ 40	15/ 44	18/ 50	25/ 40	12/ 44	27/ 43	33/ 45	21/ 45	28/ 49	36/ 31	18/ 50
72	31/ 48	33/ 41	31/ 51	29/ 31	34/ 46	33/ 44	29/ 44	33/ 39	28/ 46	31/ 42	34/ 33	36/ 39	31/ 51
73	31/ 37	18/ 36	16/ 33	15/ 49	35/ 37	22/ 42	33/ 54	1* 42	14* 30	29/ 35	28/ 35	35/ 47	33/ 54
74	18/ 30	34/ 38	27/ 37	17/ 40	22/ 45	27/ 46	20/ 46	22/ 39	23/ 44	17/ 36	35/ 32	35/ 33	27/ 46
75	32/ 54	33/ 40	34/ 33	35/ 32	15/ 42	28/ 42	25/ 40	32/ 34	16/ 34	16/ 42	36/ 38	34/ 36	32/ 54
76	1/ 41	30/ 43	34/ 43	14/ 50	34/ 36	36/ 33	36/ 33	27/ 43	31/ 39	28/ 55	28/ 47	26/ 41	28/ 55
77	35/ 43	34/ 38	36/ 37	36/ 41	19/ 35	29/ 44	24/ 44	33/ 54	33/ 43	32/ 42	33/ 55	35/ 38	33/ 55
78	36/ 50	34/ 41	32/ 45	28/ 44	17/ 40	23/ 41	15/ 41	31/ 47	4/ 50	29/ 42	27/ 47	28/ 41	36/ 50
79	24/ 29	35/ 40	35/ 45	30/ 41	35/ 35	30/ 40	27/ 28	34/ 32	30/ 39	36/ 42	34/ 38	29/ 43	35/ 45
80	35/ 46	31/ 34	32/ 41	36/ 45	29/ 49	26/ 40	23/ 32	31/ 41	29/ 37	30/ 46	31/ 30	32/ 41	29/ 49
81	35/ 36	35/ 40	28/ 33	28/ 31	23/ 48	30/ 44	16/ 32	31/ 33	29/ 41	16/ 40	35/ 39	17/ 30	23/ 48
82	35/ 43	17/ 38	29/ 50	18/ 45	15/ 45	32/ 37	10/ 44	33/ 48	34/ 32	36/ 29	36/ 40	18/ 33	29/ 50
83	35/ 37	36/ 32	35/ 33	36/ 38	16/ 41	22/ 45	35/ 46	23/ 59	16/ 48	17/ 35	18/ 32	29/ 37	23/ 59
84	30/ 30	36/ 45	36/ 45	34/ 36	33/ 39	29/ 34	1/ 37	31/ 30	24/ 36	30/ 40	31/ 42	32/ 34	36/ 45
85	35/ 48	34/ 31	15/ 39	30/ 36	31/ 47	31/ 43	4/ 29	32/ 38	18/ 32	29/ 39	36/ 34	36/ 50	36/ 50
86	31/ 48	19/ 32	28/ 42	1/ 40	29/ 42	35/ 44	16/ 49	20/ 41	16/ 39	34/ 33	35/ 46	33/ 33	16/ 49
87	34/ 34	34/ 44	36/ 42	19/ 44	1/ 43	28/ 45	34/ 36						
MEAN	40.9	39.8	42.2	42.3	42.6	40.1	40.9	39.8	40.8	41.0	39.2	39.0	51.1
S.D.	6.969	5.455	6.930	6.681	5.073	4.457	7.342	7.472	6.543	6.328	6.397	6.315	4.968
TOTAL OBS	833	762	859	839	867	825	858	821	791	832	809	824	9922

NOTES \* (BASED ON LESS THAN FULL MONTHS)  
\* (BASED ON LESS THAN FULL MONTHS AND >100 KNOTS)

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS(IST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS								TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40		
N	.4	1.5	4.4	6.3	2.0	1.2	.5		16.5	13.1
NNE	.4	.4	.5	.1					1.5	6.2
NE	.1	.1							.2	4.0
ENE		.1	.1						.2	7.0
E	.1	.5	.3	.1					1.1	6.7
ESE	.1	.9	.4						1.4	6.1
SE	.3	.9	.1	.3					1.6	7.0
SSE	.9	.9	.8	1.0	.1				3.5	7.8
S	.4	2.5	4.4	4.0	1.6	.1			13.0	10.5
SSW	1.1	.9	.9	.5					3.3	6.6
SW	.6	2.6	.6	.1					4.0	5.1
WSW	.9	.8	.4	.5					2.6	6.3
W	1.2	3.3	2.8	1.7	.4				9.5	8.1
WNW	1.0	1.9	2.5	1.9	.9	.1			8.3	9.3
NW	.9	2.7	4.4	3.2	.6	.4	.1		12.4	10.0
NNW	.6	1.3	4.2	2.9	1.2	.8	.1		11.1	11.2
VARIABLE										
CALM	////////////////////								9.9	////
TOTALS	9.0	21.2	26.9	22.8	6.9	2.6	.8		100.0	8.8

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS(LST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.4	1.9	4.7	6.2	2.0	1.3	.2	.1			17.0	12.7
NNE		.5	.8	.1							1.4	7.5
NE	.1	.1									.2	3.0
ENE	.2	.2	.3	.3							1.1	8.1
E	.3		.4								.8	5.3
ESE	.2	.5	.3								1.1	6.1
SE	.1	.9	.9	.3							2.2	7.5
SSE	.9	1.6	.9	1.0							4.3	6.9
S	.8	3.9	4.1	4.3	.6						13.7	9.5
SSW	.6	1.7	1.3	.2	.1						4.0	6.3
SW	.2	1.6	.3	.1							2.3	5.7
WSW	.6	1.5	.8	.5	.1						3.5	6.8
W	1.4	4.2	3.3	2.2	.4	.2					11.7	7.9
WNW	.4	1.9	3.0	2.3	.3	.4					8.4	10.1
NW	.2	1.8	3.0	3.1	.3	.3	.1				8.9	10.5
NNW	1.0	2.5	3.0	2.6	.5	.3	.1				10.0	9.6
VARIABLE												
CALM	////////////////////										9.6	////
TOTALS	7.5	24.9	27.1	23.2	4.5	2.6	.4	.1			100.0	8.5

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS: 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.5	1.4	3.7	5.8	2.3	1.6	.2					15.5	13.2
NNE	.4	.5	.4	.6								2.0	6.9
NE	.1	.4		.1								.6	5.7
ENE	.4	.5	.1									1.1	4.4
E	.2	.2	.4									.9	6.6
ESE	.4	.5	.2	.2								1.4	5.9
SE	.5	1.6	1.3									3.4	5.8
SSE	.3	1.3	2.4	1.6	.1							5.7	8.8
S	.8	3.3	4.2	3.3	.2							11.8	8.6
SSW	.4	1.5	1.5	.4		.1						4.0	7.5
SW	.5	1.6	.3									2.5	4.7
WSW	.4	1.0	.3	.4	.2							2.4	7.5
W	1.4	4.8	3.0	2.4	.8							12.4	7.9
WNW	1.0	3.0	2.6	2.5	.9	.3						10.2	9.4
NW	1.1	1.0	3.5	2.5		.2						6.3	9.1
NNW	.8	1.8	3.0	3.4	.3	.2	.1	.1				9.8	10.3
VARIABLE													
CALM	////////////////////											8.1	////
TOTALS	9.4	24.6	27.0	23.3	4.7	2.5	.3	.1				100.0	8.4

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS(LST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.9	1.6	3.2	7.8	3.0	1.3	.3	.3				18.5	14.0
NNE	.1	.3	.3	.4								1.2	8.1
NE	.2	.3	.2	.2								1.0	6.6
ENE	.2	.2	.4	.1								1.0	6.4
E	.1	.6	.4	.2								1.4	6.8
ESE	.4	.9	.4									1.7	5.4
SE	.3	1.0	1.0	.3								2.6	6.6
SESE	.2	.8	1.8	1.5	.2							4.5	9.9
S	1.2	2.6	4.3	3.7	.6	.4						12.8	9.7
SSW	.8	1.4	1.1	1.0	.1							4.3	7.6
SW	.8	1.9	.9	.2								3.8	5.7
WSW	.4	1.3	.6	.3								2.7	6.4
W	1.0	4.1	3.4	2.2	.8	.1						11.5	8.5
WNW	.2	2.2	2.3	3.3	1.4	.2	.2	.1				9.9	12.1
NW	.3	1.4	2.0	2.4	.6		.1					6.9	10.4
NNW	.4	1.2	3.3	2.6	1.0							8.5	10.3
VARIABLE													
CALP	////////////////////											7.8	////
TOTALS	7.5	21.7	25.8	26.2	7.7	2.0	.6	.4				100.0	9.3

TOTAL NUMBER OF OBSERVATIONS: 930



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 76-87  
MONTH: JAN HOURS(IST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.8	1.7	4.9	8.6	4.4	.9	.4	.4				22.2	13.7
NNE	.4	.5	.4	.3								1.7	6.8
NE	.1	.1	.4	.1								.8	7.6
ENE	.2	.1	.2	.1								.6	6.5
E	.1	.9	.2	.3								1.5	7.1
ESE	.3	.4	.6									1.4	5.9
SE	.2	.8	.6	.2	.1							1.9	7.5
SSE	.4	1.7	1.9	1.4	1.1							6.6	9.7
S	.4	2.3	3.4	3.9	1.5	.5						12.0	11.1
SSW	.1	1.1	1.3	1.2								3.9	9.0
SW	.2	1.0	1.3	.8								3.2	8.1
WSW	.3	.8	1.0	.4								2.5	7.0
W	.8	1.6	3.1	3.0	1.0	.1	.1	.1				9.8	10.7
WNW	.4	1.1	3.3	4.0	.6	.2						9.7	11.0
NW	.2	1.4	1.9	3.1	1.6	.3	.5	.1				9.2	13.6
NNW	.2	.9	2.2	3.5	1.0	.5						8.3	12.4
VARIABLE													
CALM	////////////////////											4.7	////
TOTALS	5.5	16.2	27.0	31.0	11.3	2.6	1.1	.6				100.0	10.7

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAG

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS (LST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.8	2.7	6.0	8.5	3.1	.9	.4	.2				22.5	12.5
NNE	.5	.1	1.2	.6								2.5	8.5
NE	.1	.1	.5									.8	6.9
ENE	.1	.8	.5									1.4	6.1
E	.2	.8	.3	.2								1.5	5.9
ESE	.4	1.4	.4	.3								2.6	6.1
SE	.1	.9	1.1	.3								2.4	7.5
SSE	.3	1.4	1.4	2.3	1.2	.1						6.7	11.1
S	.4	2.2	2.5	3.9	1.0	.5						10.4	11.2
SSW	.2	1.5	1.6	1.3	.1							4.7	8.7
SW		1.0	1.5	.6								3.1	8.8
WSW	.3	1.1	1.2		.1	.1						2.8	7.6
W	.6	1.6	3.2	2.6	.2	.1	.3					8.7	10.2
WNW	.8	2.2	2.4	2.6	.2							8.1	8.7
NW	.5	.9	1.8	2.8	1.2	.5	.3					8.1	13.0
NNW	.5	1.6	2.5	3.7	.8	.3	.2					9.6	11.3
VARIABLE													
CALM	////////////////////											4.3	////
TOTALS	6.0	20.0	28.2	29.7	7.8	2.5	1.3	.2				100.0	10.1

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS(IST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.1	2.7	5.8	5.4	3.0	1.2	.6				19.8	12.3
NNE	.3	1.0	.2	.5							2.0	6.9
NE	.2	.8	.8	.1							1.8	6.5
ENE	.3	.8	.5								1.6	5.3
E	.4	.3	.3	.1							1.2	6.2
ESE	.2	.3	.2								.8	4.3
SE	.6	1.2	.3	.2	.1						2.5	6.0
SSE	.4	1.2	2.2	1.6	.9	.1					6.3	10.5
S	.4	3.7	3.3	3.8	.8	.8					12.7	10.5
SSW	1.0	1.1	1.0	.9							3.9	6.9
SW	.5	.6	1.1	.5	.1						2.9	7.5
WSW	.8	1.4	.8	.4		.1					3.4	6.6
W	1.8	2.8	3.0	2.6	.5						10.8	8.1
WNW	.2	2.0	2.5	2.4	.5	.2	.1				8.0	10.6
NW	.4	1.4	1.8	2.8	.9	.4					7.7	11.4
NNW	.2	1.0	2.3	2.5	.6	.2	.2	.1			7.1	12.0
VARIABLE												
CALM	////////////////////										7.5	////
TOTALS	9.0	22.2	26.0	23.8	7.4	3.0	1.0	.1			100.0	9.2

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS(LST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND	
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55			GE 56
N	.9	2.8	4.7	5.6	2.4	1.7	.4					18.5	12.3
NNE	.1	.9	1.0	.1	.1							2.2	7.4
NE	.2	.2	.2									.6	5.0
ENE	.2		.1									.3	4.7
E	.1	.4	.6									1.2	6.7
ESE	.1	.6	.1									.9	5.0
SE	.2	1.5	.3	.1	.1							2.3	5.9
SSE	.3	.4	.5	1.4	.2							2.9	10.7
S	.4	2.9	4.0	3.8	1.0	1.1						13.1	11.0
SSW	1.0	2.0	1.2	.4	.3							4.9	6.7
SW	.9	1.6	.9		.1							3.4	5.6
WSW	.6	2.0	.4	.3	.1							3.5	5.8
W	1.0	2.7	3.0	2.6	.4	.1						9.8	8.8
WNW	.4	2.8	3.3	1.8	.2							8.6	8.5
NW	.6	1.2	2.9	3.1	1.0	.1	.2	.1				9.2	11.4
NNW	.6	1.4	2.8	3.0	1.8	.4	.2					10.3	12.0
VARIABLE													
CALM	////////////////////////////////////										8.2	////	
TOTALS	7.7	23.5	26.1	22.3	7.7	3.4	.9	.1				100.0	9.1

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS (LST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND	
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55			GE 56
N	.7	2.0	4.7	6.8	2.8	1.2	.4	.1				18.8	13.0
NNE	.3	.5	.6	.4	.0							1.8	7.3
NE	.1	.3	.3	.1								.8	6.2
ENE	.2	.3	.3	.1								.9	6.0
E	.2	.5	.4	.1								1.2	6.5
ESE	.3	.7	.3	.1								1.4	5.8
SE	.3	1.1	.7	.2	.0							2.4	6.6
SSE	.5	1.2	1.5	1.5	.5	.0						5.1	9.6
S	.6	2.9	3.8	3.8	.9	.4						12.4	10.3
SSW	.7	1.4	1.2	.7	.1	.0						4.1	7.4
SW	.5	1.5	.9	.3	.0							3.1	6.4
WSW	.6	1.2	.7	.4	.1	.0						2.9	6.7
W	1.1	3.1	3.1	2.4	.6	.1	.1	.0				10.5	8.7
WNW	.6	2.1	2.7	2.6	.6	.2	.0	.0				8.9	10.0
NW	.5	1.5	2.7	2.9	.8	.3	.2	.0				8.8	11.1
NNW	.6	1.5	2.9	3.0	.9	.3	.1	.0				9.3	11.1
VARIABLE													
CALM	////////////////////////////////////											7.5	////
TOTALS	7.7	21.8	26.8	25.3	7.3	2.6	.8	.2				100.0	9.3

TOTAL NUMBER OF OBSERVATIONS: 7440

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(1ST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.8	3.0	5.9	6.1	2.5	1.3	.4					20.0	11.7
NNE	.5	.5	.2	.5								1.7	6.9
NE	.1	.4	.5									.9	6.0
ENE		.4	.2									.6	7.0
E	.2	.4	.1									.7	4.2
ESE	.1	.5	.1									.7	4.8
SE	.8	.7	.4	.5								2.4	5.8
SSE	.9	1.9	1.7	2.1	.4	.2						7.2	9.1
S	1.2	3.5	4.6	2.7	1.5	.2	.1					13.9	9.6
SSW	.4	2.2	1.1	.1								3.8	5.8
SW	.9	1.2	.2	.1								2.5	4.5
WSW	1.1	1.3	.4	.7								3.4	6.4
W	1.1	4.0	3.2	.8	.2							9.3	6.9
WNW	.9	1.2	2.8	.7	.4							6.0	8.3
NW	.5	2.1	2.5	.9	.1							6.1	7.5
NNW	.4	2.2	3.7	3.1	.6	.2						10.2	10.1
VARIABLE													
CALM	////////////////////											10.5	////
TOTALS	9.9	25.4	27.5	18.4	5.7	2.0	.5					100.0	7.9

TOTAL NUMBER OF OBSERVATIONS: 846

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(LST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	3.7	5.3	5.6	1.9	.6	.1				17.8	10.9
NNE	.1	.5	.9	.5							2.0	8.5
NE	.1	.6	.1								.8	4.9
ENE	.1	.2	.5								.8	5.9
E	.4	.2	.1								.7	4.0
ESE	.1	.4		.2							.7	7.5
SE	.8	.9	.8	.2							2.8	6.0
SSE	.8	2.0	4.4	1.7	.6						9.5	8.8
S	.8	3.4	2.8	2.4	1.3						10.8	9.2
SSW	.9	1.1	.8	.2							3.1	5.7
SW	.6	1.4	.1	.2							2.4	5.3
WSW	.6	1.5	.4	.2	.1						2.8	6.0
W	1.2	3.4	2.8	1.4	.2						9.1	7.2
WNW	.8	3.5	2.6	1.9							8.9	7.4
NW	.8	2.1	3.0	.7	.4						7.0	7.7
NNW	1.4	2.8	3.4	2.6	.1	.5	.2				11.1	9.1
VARIABLE												
CALM	////////////////////										9.7	////
TOTALS	10.4	27.9	28.1	17.8	4.6	1.1	.4				100.0	7.4

TOTAL NUMBER OF OBSERVATIONS: 846

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM POORLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(IST): 0600-0900

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND	
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55			56-59
N	.9	2.7	5.4	7.2	.9	.5						17.7	10.6
NNE	.4	.5	.5	.6								1.9	7.6
NE	.2	1.3	.2	.2								2.0	5.9
ENE	.2		.1									.4	3.7
E	.2	.1										.4	3.0
ESE	.2	.5		.4								1.1	6.0
SE	.1	1.1	1.1	.5	.1							2.8	8.2
SSE	1.1	2.0	3.4	2.0	.4	.1						9.0	8.7
S	.7	2.2	3.4	2.6	.6	.5						10.0	9.9
SSW	.4	1.1	.6	.2								2.2	6.3
SW	.9	1.8	.5	.1								3.3	4.8
WSW	.5	1.8	.4	.2	.2	.1						3.2	6.8
W	1.4	4.0	2.8	1.1								9.3	6.5
WNW	.8	3.0	2.7	.7	.2							7.4	7.3
NW	.4	1.5	3.7	1.8	.2	.1						7.7	9.1
NNW	.9	3.1	3.0	3.4	.2	.4	.2					11.2	9.5
VARIABLE													
CALM	////////////////////////////////////											10.3	////
TOTALS	9.5	26.6	27.8	21.0	3.0	1.7	.2					100.0	7.7

TOTAL NUMBER OF OBSERVATIONS: 846



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AFR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(LST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND	
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55			GE 56
N	.9	3.8	4.7	9.7	1.3	.9	.1					21.5	11.2
NNE	.2	.4	1.2	.1	.1							2.0	7.8
NE	.6	.6	.5									1.7	5.2
ENE	.4	.2	.2									.8	4.1
E	.2	.4	.2									.8	5.3
ESE	.2	.6	.4	.2	.1							1.5	7.9
SE	.5	.4	.8	.1	.1							1.9	7.3
SSE	.7	1.2	2.0	3.1	.2							7.2	10.0
S	.4	1.0	3.3	4.3	1.4	.6						11.7	11.7
SSW	.2	1.4	1.2	.4	.4							3.5	7.9
SW	.1	.7	1.2	.1								2.1	7.1
WSW	.2	1.3	.7	.4								2.6	6.5
W	1.9	3.2	2.2	.9	.4							8.6	6.7
WNW	.5	1.3	1.9	.6	.4	.4						5.0	9.2
NW	.8	1.7	4.0	2.6	.7	.1						9.9	9.4
NNW	.6	1.3	3.0	3.4	1.2	1.3						10.8	12.2
VARIABLE													
CALM	////////////////////////////////////										8.3	////	
TOTALS	8.5	20.1	27.5	25.9	6.3	3.3	.1					100.0	9.0

TOTAL NUMBER OF OBSERVATIONS: 846

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(LST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.7	2.6	7.2	9.5	3.2	1.2					25.3	11.5
NNE	.4	.7	.9	.4							2.4	7.5
NE	.1	.4	.8	.1							1.4	7.4
ENE	.2	.4	.1								.7	4.5
E	.1	.2	.2								.6	6.6
ESE	.2	.4	.4	.5							1.4	8.6
SE	.1	.5	.8	.4	.1						1.9	9.1
SSE	.1	1.4	1.1	2.1	.7	.2					5.7	11.2
S	.8	1.7	4.1	3.5	2.5	.6					13.2	11.7
SSW	.1	.9	1.2	1.1	.4						3.7	10.0
SW	.1	1.4	1.3	.6	.1						3.5	8.1
WSW	.4	.6	.8	.4							2.1	7.7
W	.7	1.7	2.7	.6	.2	.1					6.0	7.9
WNW	.2	.8	1.8	1.7	.7	.4	.1				5.7	11.9
NW	.4	1.3	2.2	2.4	.8	.1	.1				7.3	10.9
NNW	.7	3.0	3.5	3.4	2.0	.8	.1				13.6	11.3
VARIABLE												
CALM	////////////////////										5.4	////
TOTALS	6.4	17.8	29.3	26.5	10.8	3.4	.4				100.0	10.0

TOTAL NUMBER OF OBSERVATIONS: 846

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(LST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS								TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40		
N	.0	2.6	8.0	9.0	3.4	1.3	.5		25.7	12.4
NNE	.5	1.2	1.2	.6					3.4	7.2
NE	.1	.2	1.2	.4					1.9	7.9
ENE	.5	.1	.1						.7	3.7
E	.8	.7	.6	.1					2.2	5.5
ESE	.2	.5	.6	.4					1.7	8.1
SE	.2	1.2	.6	.6		.1			2.7	7.6
SSE	.2	1.2	2.8	2.6	.6				7.4	10.3
S	.4	2.2	4.4	2.7	1.7	.1			11.5	10.5
SSW	.4	1.1	1.3	1.7	.1				4.5	9.1
SW	.4	.6	1.5	.7					3.2	8.1
WSW	.2	.2	.8	.6					1.9	8.7
W	.2	1.5	2.2	1.1	.1				5.2	8.5
NNW	.5	.7	1.9	1.9	.5	.1			5.6	10.3
NW	.5	1.2	2.4	1.3	.4	.1			5.8	9.2
NNW	1.2	1.5	1.5	4.4	1.7	.9			11.2	12.2
VARIABLE										
CALM	////////////////////									5.4
TOTALS	7.1	16.8	31.2	27.9	8.4	2.7	.5		100.0	9.8

TOTAL NUMBER OF OBSERVATIONS: 846

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(IST): 1000-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.8	3.1	5.1	7.4	3.5	1.1	.4				21.4	12.4
NNE	.8	.8	1.9	1.1							4.6	7.6
NE	.5	.4	.6								1.4	5.0
ENE	1.1	.5	.1								1.7	3.5
E	.7	.4									1.1	3.1
ESE		.2	.6	.4							1.2	9.1
SE	.8	1.1	1.1	.3	.1						3.2	6.4
SSE	.2	3.8	3.0	1.4	.4	.5					9.2	8.8
S	.7	3.7	5.0	2.4	.7	.6					13.0	9.2
SSW	.5	1.1	.8	.2							2.6	6.8
SW	.9	.8	.7	.1							2.6	5.2
WSW	.9	.7	.8	.7							3.2	7.0
W	1.1	3.4	1.5	.8							6.9	6.3
WNW	.6	2.6	1.9	1.1	.5						6.6	8.0
NW	.7	1.9	1.7	1.5	.2						6.0	8.4
NNW	.6	1.5	2.5	1.8	1.2	.5					8.0	11.0
VARIABLE												
CALM	////////////////////										7.3	////
TOTALS	11.0	25.9	27.2	19.0	6.6	2.6	.4				100.0	8.4

TOTAL NUMBER OF OBSERVATIONS: 846

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 70-07  
MONTH: FEB HOURS(IST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS								TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40		
N	.7	2.5	3.0	0.0	2.2	.9	.4		10.6	12.5
NNE	.1	.9	1.4	1.5					4.0	9.0
NE	.1	.2							.4	3.3
ENE	.2	.5	.1						.8	4.4
E	.4	.2	.2						.8	4.9
ESE	.2	.8	.2						1.3	5.1
SE	.8	.6	.8	.6					2.8	6.8
SSE	.5	1.8	1.9	1.5	.4	.4			6.4	9.5
S	.5	3.9	4.0	2.8	.9	.4	.1		12.6	9.7
SSW	.1	1.1	1.3	.9					3.4	8.3
SW	.7	1.8	.6	.4					3.4	5.8
WSW	1.3	2.5	.5	.4					4.6	5.0
W	.9	4.0	1.5	1.3					7.8	6.6
WNW	.7	2.4	2.2	1.2		.4			6.9	8.4
NW	.5	2.0	3.1	1.2	.1				6.9	8.1
NNW	.7	2.1	1.8	3.1	.8	.2			8.7	10.5
VARIABLE										
CALM	////////////////////////////////////								10.5	////
TOTALS	8.5	27.3	23.5	22.9	4.5	2.2	.5		100.0	8.1

TOTAL NUMBER OF OBSERVATIONS: 846

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-67  
MONTH: FEB HOURS(LST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.9	3.0	5.7	7.8	2.4	1.0	.2					21.0	11.7
NNE	.4	.7	1.0	.7	.8							2.7	7.8
NE	.2	.5	.5	.1								1.3	6.1
ENE	.3	.3	.2									.8	4.5
E	.4	.3	.2	.0								.9	4.7
ESE	.2	.5	.3	.3	.0							1.2	7.6
SE	.5	.8	.8	.4	.1	.0						2.6	7.1
SSE	.6	1.9	2.5	2.1	.4	.2						7.7	9.4
S	.7	2.8	4.0	2.9	1.3	.4	.0					12.1	10.2
SSW	.4	1.2	1.0	.6	.1							3.4	7.6
SW	.6	1.2	.8	.3	.0							2.9	6.2
WSW	.7	1.2	.6	.4	.0	.0						3.0	6.5
W	1.1	3.2	2.4	1.0	.1	.0						7.8	7.0
WNW	.6	1.9	2.2	1.2	.3	.1	.0					6.5	8.7
NW	.6	1.7	2.8	1.6	.4	.1	.0					7.1	8.8
NNW	.8	2.2	2.8	3.1	1.0	.6	.1					10.6	10.8
VARIABLE													
CALM	////////////////////////////////////											8.4	////
TOTALS	8.9	23.5	27.8	22.4	6.2	2.4	.4					100.0	8.6

TOTAL NUMBER OF OBSERVATIONS: 6768

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(IST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	56-63		
N	1.6	6.3	4.3	4.2	2.6	1.8						20.9	10.5
NNE	.4	1.3	1.5	.1	.2							3.5	7.2
NE	.6	.3	.5	.4	.1							2.0	7.2
ENE	.5	.1	.5	.1								1.3	6.1
E	.8	.6	.4	.1								1.9	4.9
ESE	.5	1.1	.6									2.3	5.0
SE	1.0	1.5	1.3	.8	.2							4.7	7.1
SSE	.5	1.5	2.0	1.5	.5							6.1	9.3
S	.6	1.8	2.7	3.2	1.1	.3						9.8	10.6
SSW	.5	1.4	1.0	.9								3.8	7.4
SW	.8	.8	1.1	.2								2.8	6.2
WSW	1.3	.8	.6	.2	.1							3.0	5.5
W	.9	1.5	1.3	1.4	.1	.3						5.5	8.7
WNW	.5	1.1	1.5	2.2	.1		.1	.2				5.7	10.5
NW	.5	1.2	1.9	1.5	.6	.2						6.0	10.2
NNW	.6	1.5	2.9	1.2	1.0	.1						7.3	9.7
VARIABLE													
CALM	////////////////////											13.3	////
TOTALS	11.8	22.8	24.3	18.0	6.7	2.8	.1	.2				100.0	7.8

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(IST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND	
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55			GE 56
N	1.0	4.7	4.8	4.7	2.6	1.6						19.5	11.3
NNE	.8	.9	.9	.6	.2							3.3	7.8
NE	.4	.3	.2	.2	.1							1.3	6.9
ENE	.4	.6	1.0	.4								2.5	7.1
E	.6	1.0	.5									2.2	5.2
ESE	.6	.6	.9	.2								2.4	6.3
SE	.6	1.2	1.8	1.1	.1	.1						4.9	8.6
SSE	.8	1.4	2.0	1.4	.2	.2						6.0	9.0
S	.9	2.2	4.3	2.0	.9	.1						10.3	9.2
SSW	.8	1.0	.2	.2	.1							2.3	6.0
SW	.4	1.3	.5	.2								2.5	5.8
WSW	.3	.8	.3	.1								1.5	5.4
W	1.2	1.2	1.6	1.0	.1							5.1	7.1
WNW	1.4	1.5	2.3	1.4	.4		.3					7.3	9.1
NW	.4	1.8	1.1	1.6	.4	.2						5.6	9.6
NNW	1.0	2.5	1.9	1.3	1.6							8.3	9.5
VARIABLE													
CALM	////////////////////////////////////											15.2	////
TOTALS	11.6	22.9	24.4	16.6	6.8	2.3	.3					100.0	7.6

TOTAL NUMBER OF OBSERVATIONS: 930



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(LST): 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	1.3	3.2	5.6	5.7	3.4	1.2	.3					20.8	11.7
NNE	.2	1.0	.9	1.0								3.0	8.1
NE	.3	.8	.3	.2								1.6	6.1
ENE	.1	.5	.4	.2								1.3	7.1
E	1.0	1.7	.9	.5								4.1	6.4
ESE	.8	1.4	1.2	.6								4.0	6.8
SE	.5	.3	1.2	.8	.1							2.9	8.3
SSE	.1	1.2	2.0	1.8	1.3	.1						6.6	11.8
S	.4	3.0	3.3	2.2	.5	.1						9.6	8.8
SSW	.9	1.2	.5	.1								2.7	5.0
SW	.3	.6	.2	.2								1.4	6.2
WSW	.3	.8	.1	.2								1.4	5.6
W	.3	1.4	2.3	1.0	.1							5.1	8.2
WNW	.6	1.6	1.9	1.0	.6	.2	.1					6.1	9.7
NW	.6	2.5	2.5	1.2	.6							7.4	8.4
NNW	1.0	2.6	2.9	.9	1.3	.1	.2	.1				9.0	9.9
VARIABLE													
CALM	////////////////////											13.1	////
TOTALS	8.8	23.8	26.2	17.5	8.1	1.7	.6	.1				100.0	8.1

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(LST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.0	3.3	6.8	9.8	3.5	1.8	.4	.1			26.8	12.6
NNE	.2	1.0	1.2	.8							3.1	8.0
NE	.5	1.0	.6								2.2	5.4
ENE		1.2	.6	.5	.1						2.5	8.3
E	.8	1.6	.8	.1							3.2	5.7
ESE	.4	.2	1.2	.8							2.6	8.4
SE	.1	1.1	1.9	.6							3.8	8.2
SSE	.3	1.1	2.3	2.7	1.2	.1					7.6	11.3
S	.6	1.8	2.7	4.0	1.6	.4					11.2	11.6
SSW	.5	1.0	1.1	1.1	.1						3.8	8.5
SW	.2	.4	1.0								1.6	6.6
WSW	.3	.2	.5	.1							1.2	6.4
W	.4	.9	1.6	1.6							4.5	8.9
WNW	.3	.2	1.5	1.8	.5	.2	.1				4.7	12.0
NW	.4	.6	2.0	1.8	.6	.1					5.7	10.6
NNW	.4	2.0	2.6	2.5	1.7	.1	.3	.1			9.8	11.5
VARIABLE												
CALM	////////////////////										5.8	////
TOTALS	6.7	17.6	28.4	28.2	9.5	2.8	.9	.2			100.0	10.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(IST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.9	2.2	4.9	9.2	3.4	2.4	.6				23.7	13.5
NNE	.2	2.2	2.7	1.2	.3						6.6	8.6
NE	.3	1.2	.8	.5	.1						2.9	7.6
ENE	.1	1.0	.4	.8							2.3	8.4
E	.4	1.0	.9	.4							2.7	7.2
ESE	.1	.3	1.4	.4							2.3	8.8
SE	.5	1.5	1.4	.9							4.3	7.8
SSE	.8	1.0	2.2	3.0	1.0	.9					8.7	12.0
S	.4	1.8	2.9	4.0	1.4	.9					11.4	12.2
SSW	.3	.9	1.4	.4	.2	.2					3.4	9.5
SW		.3	1.0	.9							2.2	10.4
WSW	.5	.3	.6	.2							1.7	6.6
W	.1	.2	2.0	1.5	.5	.2					4.6	11.9
WNW		.4	1.5	1.7	1.0	.5	.1				5.3	13.7
NW	.4	1.1	1.5	2.3	1.0						6.2	10.8
NNW	.4	1.1	2.2	3.3	1.4	.3					8.7	12.1
VARIABLE												
CALM	////////////////////										3.1	////
TOTALS	5.6	16.3	27.7	30.8	10.3	5.4	.8				100.0	11.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(LST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND	
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55			GE 56
N	.6	2.4	4.7	8.9	3.8	1.7	.1					22.3	13.1
NNE	.1	2.0	2.6	2.5	.2	.2						7.6	9.6
NE	.8	1.6	.3	.9	.1							3.7	6.9
ENE	.4	.8	1.0	.8	.1							3.0	8.3
E		.9	.8	.1								1.7	7.0
ESE	.2	.5	1.1	.4								2.3	8.3
SE		1.0	2.2	1.7								4.8	9.2
SSE	.3	1.4	2.8	2.5	1.4	.3						8.7	11.5
S	.3	2.5	3.1	5.1	.9	.9						12.7	11.5
SSW	.1	.4	1.1	1.0		.2						2.8	10.4
SW	.1	.2	1.0	.1								1.4	7.6
WSW	.1	.3	.3	.1	.2							1.1	9.4
W	.4	.5	1.1	1.1	.8	.1	.1					4.1	11.3
WNW	.2	.4	1.5	1.5	.6	.3	.1					4.7	12.4
NW	.3	.5	1.3	3.1	1.2	.3	.1					6.9	13.1
NNW	.4	1.2	2.7	4.0	1.2	.1						9.6	11.3
VARIABLE													
CALM	////////////////////////////////////										2.7	////	
TOTALS	4.5	16.7	27.4	33.7	10.4	4.2	.4					100.0	10.9

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 70-07  
MONTH: MAR MONTHS ILST: 1900-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	56-56		
N	1.2	4.4	5.4	8.8	2.8	.8	.1					27.4	11.4
NNE	.3	2.2	1.3	1.0	.2							4.9	8.1
NE	.6	1.3	1.0	.9	.2							4.0	7.8
ENE	.2	1.9	.4	.1								2.7	5.6
E	.9	1.4	.4									2.7	4.7
ESE	1.2	1.5	.4	.1								3.2	4.6
SE	.9	2.7	2.4	1.1	.1							7.1	7.1
SSE	.2	2.0	3.2	2.4	.6							8.5	10.0
S	.5	2.6	3.9	3.3	.5	.3						11.2	10.1
SSW	.3	.2	1.0	.4	.2	.1						2.3	9.9
SW	.3	.9	.1	.3								1.6	6.3
WSW		.4	.3	.2	.1							1.1	9.4
W	.4	.6	1.2	.5	.1	.1	.1					3.1	9.3
WNW	.4	1.3	1.6	.8	.3	.1	.2					4.7	9.7
NW	.4	.8	2.9	1.3	.4	.4	.1					6.3	11.0
NNW	.4	1.0	2.6	1.6	1.1							6.7	10.4
VARIABLE													
CALM	////////////////////											6.5	////
TOTALS	8.4	25.2	28.1	22.8	6.8	1.8	.5					100.0	8.8

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 76-87  
MONTH: MAR HOURS(LST): 2100-2300

WIND SPEED IN KNOTS													
DIRECTION (DEGREES)	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	56-60	TOTAL %	MEAN WIND
N	1.5	3.7	5.6	5.5	3.3	1.6						21.2	11.4
NNE	.8	.9	1.3	.8	.3							4.0	8.6
NE	.3	.6	.3	.6								1.9	7.8
ENE	.8	1.0	.5									2.3	5.1
E	.9	1.0	.4	.2								2.5	5.3
ESE	1.0	1.2	.4	.3								2.9	5.5
SE	1.2	1.5	1.3	.8	.1							4.8	7.1
SSE	.9	2.9	1.6	1.8	.2							6.9	8.4
S	1.0	2.4	2.5	3.1	1.3	.5						10.8	10.5
SSW	.3	1.5	1.3	.9	.1							4.1	8.0
SW	.3	1.2	.5	.2								2.3	5.8
WSW	.3	1.4	.3	.3	.2							2.6	7.5
W	1.0	2.3	.8	1.0	.1			.1				5.2	7.4
WNW	.9	1.2	2.0	.6	.3		.1	.1				5.3	9.1
NW	.2	.6	2.2	1.2	.4	.2						4.8	10.5
NNW	.2	2.0	2.9	1.3	.5	.2	.2					7.4	10.1
VARIABLE													
CALM	////////////////////////////////////											11.2	////
TOTALS	10.9	25.3	24.0	18.6	7.0	2.6	.3	.2				100.0	8.1

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/NAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(IST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS								TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40		
N	1.1	3.0	5.3	7.1	3.2	1.0	.2	.0	22.3	12.0
NNE	.4	1.4	1.5	1.0	.2	.0			4.5	8.5
NE	.5	.9	.5	.5	.1				2.4	7.1
NNE	.3	.9	.6	.4	.0				2.2	7.1
E	.7	1.1	.6	.2					2.6	5.0
ESE	.6	.9	.9	.4					2.7	6.6
SE	.6	1.3	1.7	1.0	.1	.0			4.7	7.9
SSE	.4	1.6	2.3	2.1	.8	.2			7.4	10.5
S	.6	2.3	3.2	3.4	1.0	.4			10.9	10.6
SSW	.5	.9	.9	.6	.1	.1			3.1	8.1
SW	.3	.7	.7	.3					2.0	6.0
WSW	.4	.6	.4	.2	.1				1.7	6.7
W	.6	1.1	1.5	1.1	.2	.1	.0	.0	4.6	9.0
WNW	.6	1.0	1.7	1.4	.5	.2	.1	.0	5.5	10.6
NW	.4	1.1	1.9	1.7	.7	.2	.0		6.1	10.5
NNW	.6	1.7	2.6	2.0	1.2	.1	.1	.0	8.3	10.6
VARIABLE										
CALM	////////////////////								8.9	////
TOTALS	0.5	21.3	26.3	23.3	8.2	2.9	.5	.1	100.0	9.1

TOTAL NUMBER OF OBSERVATIONS: 7440

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(LST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL Σ	MEAN WIND	
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55			GE 56
N	.9	4.2	3.9	6.1	1.9	.6	.2					17.8	10.9
NNE	.2	.8	1.0	1.2	.4							3.7	9.9
NE	.3	.9	1.0	.3								2.6	7.2
ENE	.3	.9	.4									1.7	5.5
E	.9	.7	.4									2.0	4.9
ESE	.9	1.4	.8	.1								3.2	5.3
SE	.4	1.3	.6	1.0	.1							3.4	7.8
SSE	.7	1.4	1.6	.7	.3	.2						4.9	8.6
S	1.1	3.8	3.1	2.6	.2	.2						11.0	8.3
SSW	.4	3.2	1.4	.1								5.2	5.6
SW	1.3	2.1	1.2									4.7	5.0
WSW	.9	1.6	.4	.2								3.1	4.8
W	.7	2.1	1.1	.6								4.4	6.5
WNW	1.7	1.1	.6	.8	.2							4.3	6.5
NW	1.3	2.0	1.9	1.1	.1							6.4	7.0
NNW	1.0	2.7	2.7	2.0	.7	.6	.1					9.7	9.9
VARIABLE													
CALM	////////////////////////////////////										11.9	////	
TOTALS	13.1	30.2	22.1	16.8	4.0	1.6	.3					100.0	7.1

TOTAL NUMBER OF OBSERVATIONS: 900



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(LST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	2.8	3.8	5.9	2.1	.9					16.1	11.6
NNE	.1	.4	.6	1.2	.1						2.4	10.8
NE	.4	.7	.8	.3							2.2	6.8
ENE	.4	1.3	.7	.1							2.6	5.7
E	.6	1.0	1.0	.1							2.7	6.0
ESE	.3	1.1	.7	.1							2.2	6.3
SE	.6	1.4	.7	.7	.3						3.7	8.1
SSE	.3	1.8	1.8	.8	.3	.2					5.2	8.7
S	.4	3.6	3.1	1.3	.3						8.8	7.6
SSW	.9	1.7	.9	.4							3.9	5.7
SW	.7	1.2	1.6								3.4	6.3
WSW	.9	1.8	.4	.3							3.4	5.2
W	1.7	2.2	1.6	1.2	.1						6.8	6.6
WNW	1.6	1.9	1.4	1.0			.1				6.0	6.6
NW	.8	2.0	2.2	1.1							6.1	7.3
NNW	1.9	4.7	2.8	2.0	.3	.1	.1				11.9	7.5
VARIABLE												
CALM	////////////////////										12.6	////
TOTALS	12.2	29.6	23.9	16.7	3.7	1.2	.2				100.0	7.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(IST): 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	56-63		
N	1.4	2.3	6.9	6.1	2.4	1.3	.1					20.7	11.5
NNE	.8	1.4	1.1	.9	.1	.1						4.4	8.0
NE	.4	.9	.8	.1								2.2	6.2
ENE	.9	.3	.7	.2								2.1	5.6
E	.2	1.3	.6	.2								2.3	6.4
ESE	.2	.4	.6	.4								1.7	7.9
SE	.9	1.9	1.4	.9								5.1	6.8
SSE	.7	1.6	1.7	1.4	.8	.3						6.4	10.1
S	1.3	2.1	3.7	2.3	.2							9.7	8.4
SSW	.2	.9	.9	.6	.2							2.8	8.6
SW	.2	1.2	1.2	.4								3.1	7.2
WSW	.1	.7	.6	.2								1.6	7.8
W	.6	2.4	2.0	1.4	.2							6.7	8.0
WNW	1.0	.7	1.1	1.6	.3		.3					5.0	10.2
NW	1.1	1.6	1.9	1.2	.1							5.9	7.5
NNW	1.2	2.7	2.6	2.6	.6	.3						9.9	9.3
VARIABLE													
CALM	////////////////////											10.4	////
TOTALS	11.3	22.4	27.6	20.7	5.0	2.1	.4					100.0	8.1

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(1ST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.7	1.2	5.0	8.8	3.4	1.9	.8					21.8	14.0
NNE	.6	2.6	2.9	3.4	.6							10.0	9.6
NE	.7	.6	2.3	1.3								4.9	8.7
ENE	.8	.1	.6	.2								1.7	5.8
E	.4	1.0	1.3	1.0								3.8	8.1
ESE	.8	.6	1.1	.3								2.8	6.5
SE	.3	.7	.8	1.9	.3							4.0	10.6
SSE	.4	1.0	2.4	1.4	.8	.3						6.4	10.8
S	.2	1.2	2.1	5.0	1.0	.8	.1					10.4	12.8
SSW	.3	.7	.9	1.8	.4	.2						4.3	11.5
SW	.6	.8	1.1	.7	.4	.1						3.7	9.4
WSW		.2	1.3	.7								2.2	10.0
W	.3	.9	1.4	1.3	.8	.3						5.1	11.3
WNW	.2	.6	1.3	1.7	.4	.1	.4					4.8	13.0
NW	.3	.7	.8	3.2	.2	.1						5.3	11.5
NNW	.8	2.0	1.2	1.9	.8	.2						6.9	9.8
VARIABLE													
CALM	////////////////////////////////////											1.9	////
TOTALS	7.4	14.7	26.7	34.7	9.2	4.1	1.3					100.0	11.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(LST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.4	1.6	3.0	9.0	5.4	1.9	.3	.1				21.8	14.8
NNE		1.8	2.3	3.3	.8							8.2	10.6
NE	.3	1.0	2.1	1.3	.2							5.0	9.3
ENE	.4	1.2	.7	.9								3.2	7.9
E	.9	.8	1.1	1.8								4.6	8.5
ESE		.6	1.1	.4	.1							2.2	9.3
SE		.7	1.2	1.8	.3	.2						4.2	11.6
SSE	.2	.8	1.2	3.0	1.1	.2						6.6	12.6
S	.3	.9	1.8	4.8	1.3	1.1						10.2	13.6
SSW		.4	.7	1.3	1.0		.1					3.6	13.7
SW	.1	.4	1.3	.4	.1	.1						2.6	9.6
WSW	.1	.8	.8	.7								2.3	9.1
W	.1	.4	2.1	2.4	.4	.7		.1				6.3	13.3
WNW		.4	.6	2.2	.6	.2	.2					4.2	14.1
NW	.4	.6	1.7	2.4	1.1	.2	.1					6.6	12.5
NNW	.7	1.0	1.7	1.8	.8	.6	.1					6.6	11.4
VARIABLE													
CALM	////////////////////////////////////											1.9	////
TOTALS	4.1	13.3	23.3	37.7	13.3	5.2	.9	.2				100.0	12.1

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(LST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.2	1.9	3.3	8.3	5.2	2.4	.2					21.7	14.7
NNE	.1	1.0	3.7	2.7	.7	.1						8.2	10.5
NE	.3	1.1	2.6	1.6	.7							6.2	10.1
ENE	.4	1.0	2.2	.6								4.2	7.8
E	.4	1.3	1.0	1.0								3.8	7.6
ESE	.3	.9	.7	.6	.2							2.7	8.0
SE	.2	1.0	1.4	2.2	.4							5.3	10.3
SSE	.2	1.0	2.2	2.7	.9	.3						7.3	12.0
S	.1	1.0	1.8	3.6	1.3	.6						8.3	12.9
SSW	.2	.8	1.0	1.1	1.0	.1	.1					4.3	12.5
SW		.4	.3	1.3	.1							2.2	11.2
WSW	.4	.4	1.0	.6								2.4	8.1
W	.2	.6	1.7	2.6	.7	.4	.1					6.2	12.4
WNW	.2	.4	1.2	1.8	.4	.3	.2					4.7	13.2
NW	.2	.6	.9	1.3	1.3	.2						4.6	13.1
NNW	.3	1.6	1.1	2.6	.3	.2						6.1	10.4
VARIABLE													
CALM	////////////////////											1.7	////
TOTALS	4.1	15.0	26.1	34.3	13.3	4.8	.7					100.0	11.6

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(LST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.2	3.2	5.1	9.3	3.8	.9	.4					23.0	12.7
NNE	.4	1.4	2.6	1.4	.7							6.6	9.5
NE	.7	1.7	1.6	.2	.4							4.6	7.6
ENE	1.0	1.3	2.0	.9								5.2	7.3
E	.9	2.3	1.2	.6								5.0	6.3
ESE	.7	.9	1.1	.6								3.2	7.1
SE	.9	2.2	2.6	1.1	.1							6.9	7.4
SSE	.7	2.7	2.4	1.8	.3							7.9	8.5
S	1.1	2.3	2.1	2.2	.3	.1						8.2	8.7
SSW	.4	.6	.8	.4	.1							2.3	7.3
SW	.2	1.2	1.0	.2								2.7	6.5
WSW	.2	.6	.4	.3								1.6	7.0
W	.6	1.4	1.0	1.0	.2	.1						4.3	8.6
WNW	.4	.9	1.3	1.1	.1							3.9	8.6
NW	.1	.4	.7	2.0	.7	.1						4.0	12.2
NNW	.6	.6	1.2	1.0	.7							4.0	10.2
VARIABLE													
CALM	////////////////////											6.6	////
TOTALS	9.1	23.8	27.1	24.2	7.5	1.2	.4					100.0	8.8

TOTAL NUMBER OF OBSERVATIONS: 899

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(IST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS								TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40		
N	.9	4.4	5.0	7.2	1.8	.8	.1		20.2	10.9
NNE	.7	.7	1.8	1.2					4.3	8.5
NE	.4	1.7	.7	.2					3.0	5.9
ENE	1.2	2.2	.4	.1					4.0	4.6
E	.7	2.0	1.2	.6					4.4	6.7
ESE	.7	.8	1.2	.2					2.9	6.3
SE	.7	2.4	2.0	.6	.1				5.8	6.7
SSE	.6	2.7	2.3	1.3	.3	.1			7.3	8.3
S	1.1	4.1	1.9	1.8	.3				9.2	7.5
SSW	.4	1.4	.7	.3					2.9	5.9
SW	1.2	1.1	1.0						3.3	5.1
WSW	.2	1.2							1.4	4.4
W	1.1	1.6	1.2	.6	.2				4.7	6.7
WNW	.8	.7	1.0	1.2	.1	.1			3.9	8.8
NW	.3	2.0	1.3	1.0					4.7	7.3
NNW	.8	1.7	2.4	1.1	.1	.2			6.3	8.5
VARIABLE										
CALM	////////////////////								11.6	////
TOTALS	11.8	30.7	24.2	17.4	3.0	1.2	.1		100.0	7.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(1ST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	2.7	4.5	7.6	3.3	1.3	.3	.0			20.4	12.7
NNE	.4	1.3	2.0	1.9	.4	.0					6.0	9.8
NE	.5	1.1	1.5	.7	.2						3.8	8.2
ENE	.7	1.1	1.0	.4							3.1	6.5
E	.6	1.3	1.0	.7							3.6	7.0
ESE	.5	.8	.9	.3	.0						2.6	7.0
SE	.5	1.5	1.3	1.3	.2	.0					4.8	8.5
SSE	.5	1.6	2.0	1.6	.6	.2					6.5	10.0
S	.7	2.4	2.4	2.9	.6	.3	.0				9.5	10.0
SSW	.4	1.2	.9	.8	.3	.0	.0				3.7	9.0
SW	.5	1.1	1.1	.4	.1	.0					3.2	7.2
WSW	.4	.9	.6	.4							2.3	6.9
W	.7	1.5	1.5	1.4	.3	.2	.0	.0			5.6	9.3
WNW	.7	.8	1.1	1.4	.3	.1	.2				4.6	10.1
NW	.6	1.2	1.4	1.7	.4	.1	.0				5.4	9.6
NNW	.9	2.1	2.0	1.9	.5	.3	.0				7.7	9.4
VARIABLE												
CALM	////////////////////										7.3	////
TOTALS	9.2	22.5	25.1	25.3	7.4	2.7	.6	.0			100.0	9.1

TOTAL NUMBER OF OBSERVATIONS: 7199



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS(LST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.6	3.1	3.3	3.8	1.4	.5					12.8	10.7
NNE	.2	.8	.9	.9	.2						2.9	8.6
NE	.1	.8	1.2	.2							2.3	7.5
ENE	.5	1.1	1.0	.3							2.9	6.5
E	.4	1.8	.9	.4							3.5	6.2
ESE	.6	1.8	.2	.2							2.9	5.0
SE	.5	1.4	1.1	.9							3.9	7.5
SSE	1.5	2.9	3.0	1.7	.6						9.8	8.0
S	2.0	3.8	2.3	1.1	.5						9.7	7.0
SSW	1.1	1.6	1.4	.3	.5						4.9	7.3
SW	1.0	2.3	1.2	.9		.1					5.4	7.0
WSW	.5	1.5	.8	.1							2.9	5.3
W	1.6	1.5	1.9	.1	.1						5.3	5.7
WNW	1.5	1.4	.3	.8							4.0	5.8
NW	1.1	1.9	2.2	.6							5.8	6.5
NNW	1.4	2.0	1.3	1.6	.2						6.6	7.3
VARIABLE												
CALM	////////////////////										14.5	////
TOTALS	14.8	29.7	22.8	13.9	3.7	.6					100.0	6.4

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS(LST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS							TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33		
N	1.0	2.6	4.0	4.9	.9	.3		13.7	10.3
NNE	1.0	1.2	.9	.3				3.3	5.5
NE	.4	.5	1.2	.1				2.3	6.2
ENE	.2	.8	.8					1.7	6.1
E	.9	.6	1.0	.4				2.9	6.4
ESE	.4	.5	.3					1.3	5.3
SE	.8	1.7	1.1	.3				3.9	6.1
SSE	1.2	2.4	2.4	.8	.5			7.2	7.6
S	1.5	3.8	3.3	.8	.6			10.0	7.4
SSW	1.0	1.5	1.0	.9	.1			4.4	7.1
SW	.9	2.2	1.9	.9				5.8	7.0
WSW	.6	1.3	.6	.1				2.7	5.2
W	1.8	2.3	1.8	.3	.2	.2		6.7	6.5
WNW	1.3	1.9	.8	.6	.2			4.8	6.3
NW	1.1	2.4	2.4	.4				6.2	6.4
NNW	1.5	3.8	1.4	1.0	.4			8.1	6.9
VARIABLE									
CALM	////////////////////////////////////							15.1	////
TOTALS	15.5	29.4	24.7	11.8	3.0	.5		100.0	6.2

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS(IST): 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS								TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40		
N	1.3	3.9	4.8	7.0	1.1		.3		18.4	10.1
NNE	.4	.6	1.5	.8		.1			3.4	8.6
NE	.4	.8	1.3	.6	.1				3.2	8.0
ENE	.8	1.0	1.2	.1					3.0	6.0
E	.8	.8	1.4	.8					3.7	7.1
ESE	1.0	1.0	.1	.2					2.3	5.0
SE	.4	2.2	1.9	.4					4.9	6.7
SSE	1.1	2.2	2.6	1.2	.3				7.3	7.9
S	1.2	2.6	2.8	2.7	.8	.3			10.3	9.4
SSH	.8	1.4	1.8	1.3	.3				5.6	8.7
SN	.5	.5	1.1	.5	.3				3.0	8.8
WSN	.8	1.0	.5	.6					2.9	6.2
N	.8	1.6	2.0	1.7	.1	.1			6.3	8.7
WNW	.6	.8	.6	1.2	.3				3.5	9.2
NW	.9	2.2	1.1	.9	.4				5.4	7.9
NNW	1.6	2.3	1.9	1.3	.4				7.5	7.6
VARIABLE										
CALM	////////////////////								9.1	////
TOTALS	13.2	24.5	26.8	21.3	4.2	.5	.3		100.0	7.7

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS(1ST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	56-66		
N	1.2	2.0	3.5	7.0	2.0	.4	.2					16.5	11.7
NNE	1.1	1.3	1.8	1.9	.1							6.2	8.3
NE	.5	1.2	1.5	.9	.1							4.2	8.6
ENE	.5	.5	.9	1.0								2.9	8.4
E	.5	2.2	1.8	.9	.1							5.5	7.1
ESE	.3	.4	1.2	.4								2.4	7.5
SE	.6	.6	1.4	1.5	.5	.1						4.6	10.5
SSE		1.7	3.0	2.2	.5	.3						7.7	10.8
S	.5	1.3	3.4	5.4	2.0	.4	.1					13.2	12.2
SSW	.3	.9	.9	1.1	1.2							4.3	11.9
SW	.3	.9	1.0	.8	1.1	.1						4.1	10.8
WSW	.4	.8	1.4	1.8	.3							3.9	9.4
W	.6	.6	1.8	1.5	.4	.1						4.3	10.0
WNW	.4	.5	.9	3.2	.5							5.6	11.9
W	.2	.8	1.1	1.5	.9							4.4	11.9
WNW	.6	1.3	2.8	2.0	.4	.2						6.7	10.8
VARIABLE													
CALM	////////////////////											3.3	////
TOTALS	8.4	17.8	26.8	32.2	10.3	1.7	.3					100.0	10.2

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS: 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS								TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40		
N	.2	1.5	3.1	6.2	2.7	.5	.2		14.5	13.3
NNE	.3	1.2	2.8	1.7	.2				6.2	9.0
NE	1.0	1.3	1.4	.8					4.4	6.9
NNE	.8	1.0	1.9	1.5	.2				5.4	8.8
E	.5	1.1	1.9	1.0					4.5	7.0
ESE	.2	.6	.8	1.0	.1				2.7	9.2
SE	.4	1.0	2.6	1.6	.5				6.1	9.8
SSE	.4	1.9	2.0	2.7	1.2	.5			9.8	11.2
S	.5	1.9	1.8	4.0	3.4	1.7	.1		13.1	13.9
SSW	.3	.1	.6	1.2	1.4		.1		3.8	13.9
SW	.6	1.1	.6	1.0	.5		.1		4.0	9.8
WSW		.3	.6	1.0	.4	.1			2.5	12.7
W	.3	.3	1.2	2.2	1.1	.1			5.2	12.5
WNW	.3	.5	.5	1.9	.9	.3			4.5	13.1
W	.1	.3	1.5	1.8	.8	.1			4.6	12.7
WNW	.2	.6	2.0	1.9	1.4	.3			6.6	12.5
VARIABLE										
CALM	////////////////////////////////////								3.1	////
TOTALS	6.3	14.8	25.6	31.4	14.8	3.3	.5		100.0	11.1

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 70-87  
MONTH: MAY HOURS(LST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.9	2.2	3.7	4.0	2.9	1.2						15.6	12.5
NNE	.4	1.1	2.7	1.4	.2							5.8	9.1
NE	.4	.5	1.9	1.4								4.3	9.3
ENE	.3	.8	.9	1.1								3.0	8.5
E	1.2	1.5	1.7	1.6								6.0	7.3
ESE	.4	.5	1.3	.6								2.9	8.2
SE	.5	1.0	2.3	1.1	.4							5.3	8.9
SSE	.3	1.4	1.4	2.7	1.2	.5						7.5	12.1
S	.3	1.5	2.8	4.1	2.0	1.2						11.9	12.8
SSW	.3	.5	1.5	1.1	.9	.6	.3					5.3	14.0
SW	.1	.8	1.1	1.0	.4							3.3	10.3
WSW	.4	.2	1.3	1.5	.3							3.8	10.6
W	.6	1.4	1.6	1.4	.5							5.6	9.3
WNW	.2	.3	.6	2.3	1.2	.2	.2					5.1	14.5
NW	.2	.5	1.2	2.0	.8	.2						4.9	11.9
NNW	.3	.4	1.2	2.0	1.6	.3						5.4	13.4
VARIABLE													
CALM	////////////////////											3.8	////
TOTALS	7.1	14.6	27.1	30.1	12.5	4.3	.5					100.0	10.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 76-87  
MONTH: MAY HOURS(LST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.5	3.0	4.5	4.7	3.3	.5					16.7	12.0
NNE	.4	1.2	2.6	2.4							6.6	9.3
NE	.2	.8	2.0	1.4	.1						4.5	9.1
ENE	.4	1.1	2.2	.6							4.3	7.8
E	.9	2.2	2.3	.4							5.7	6.4
ESE	1.0	1.3	.9	.5							3.7	6.2
SE	.9	2.2	3.4	.8	.2						7.4	7.6
SSE	.5	1.9	3.7	2.2	.8	.1					9.1	9.8
S	.8	2.6	3.1	2.9	.9	.2					10.4	9.6
SSW	.2	1.2	1.4	1.3	.6	.4	.1				5.3	11.7
SW	.2	.5	.8	.2							1.7	7.4
WSW	.6	.6	.8	.4	.2						2.7	7.9
W	.9	1.6	.9	.9	.3	.1					4.6	8.3
WNW	.2	.6	.6	1.2	.6	.1					3.4	11.4
NW	.2	.8	1.1	1.1	.2						3.3	9.6
NNW	.3	1.4	1.6	1.9	.2						5.5	9.8
VARIABLE												
CALM	////////////////////										5.1	////
TOTALS	0.3	22.9	31.7	22.9	7.5	1.5	.1				100.0	9.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS(LST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS							TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33		
N	1.2	2.7	4.1	4.4	2.0	.3		14.7	10.6
NNE	.6	1.9	1.3	1.2	.1			5.2	7.9
NE	.2	1.7	1.7	.5				4.2	7.4
ENE	.2	1.3	1.7	.5				3.0	7.0
E	1.1	2.7	1.7	.5				6.0	6.0
ESE	.5	1.2	1.3					3.0	5.8
SE	1.1	3.1	2.5	1.2	.1			8.0	7.3
SSE	1.1	1.7	3.4	1.7	.5			8.5	8.4
S	1.3	4.1	3.0	.8	.8	.1		10.0	7.5
SSW	.9	2.9	1.0	.4	.2	.1		4.9	6.9
SW	1.2	1.6	.4	.6		.1		4.2	6.5
WSW	.3	1.8	1.0	.3				3.4	6.2
W	1.0	.8	.6	.6				3.0	6.4
WNW	.4	.4	.9	.1				1.8	6.6
NW	.4	1.1	.6	1.1				3.2	8.1
NNW	.5	1.4	1.8	.8	.1			4.6	7.9
VARIABLE									
CALM	////////////////////							11.4	////
TOTALS	12.0	29.9	27.3	14.8	3.9	.6		100.0	6.9

TOTAL NUMBER OF OBSERVATIONS: 930



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 70-07  
MONTH, MAY HOURS(IST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	56	
N	.9	2.6	3.0	5.4	2.0	.5	.1				14.3	11.0
NNE	.6	1.2	1.0	1.3	.1	.0					5.0	8.5
NE	.9	.9	1.5	.7	.0						3.7	7.9
ENE	.5	.9	1.3	.6	.0						3.4	7.7
E	.8	1.6	1.6	.8	.0						4.7	6.8
ESE	.6	.9	.8	.4	.0						2.6	6.6
SE	.7	1.6	2.0	1.0	.2	.0					5.5	8.1
SSE	.8	2.0	2.7	1.9	.7	.2					8.3	9.5
S	1.0	2.7	2.0	2.7	1.4	.4	.0				11.1	10.1
SSW	.6	1.2	1.2	.9	.7	.1	.1				4.8	10.1
SW	.6	1.2	1.0	.7	.3	.0	.0				3.9	8.3
WSW	.5	.9	.9	.6	.2	.7					3.1	8.0
W	1.0	1.3	1.4	1.1	.3	.1					5.1	8.4
WNW	.6	.8	.7	1.4	.5	.1	.0				4.1	10.7
NW	.5	1.2	1.4	1.2	.4	.0					4.7	9.2
NNW	.8	1.7	1.7	1.6	.6	.1					6.4	9.1
VARIABLE												
CALM	////////////////////										8.2	////
TOTALS	18.7	22.8	26.6	22.3	7.5	1.7	.2				100.0	8.5

TOTAL NUMBER OF OBSERVATIONS: 7440

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS (LST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.4	2.7	2.0	1.0	.1						7.0	7.0
NNE	.3	.7	.8	1.0	.1						2.9	9.1
NE	.3	.2	.6	.1							1.2	6.7
NNE	.7	.3	.7	.1							1.8	5.9
E	1.0	1.7	.7								3.3	4.7
ESE	.4	1.4	.6	.4							2.9	6.0
SE	.8	2.2	1.4	.1							4.6	5.6
SSE	1.0	2.1	2.4	.8							6.3	6.7
S	2.1	4.0	2.9	2.3							11.3	7.1
SSW	1.4	2.0	.8	.3	.1						4.8	5.2
SW	1.4	1.8	1.2	.4							4.9	5.7
WSW	1.7	3.7	1.4	.4							7.2	5.2
W	2.1	4.4	1.6	.9	.2	.1					9.3	6.3
WNW	1.1	2.9	1.2	.7							5.9	6.0
NW	1.4	3.4	1.6	.8		.1					7.4	6.5
NNW	1.4	1.8	2.1	.6	.2						6.1	6.5
UNAVAILABLE												
CALM	////////////////////										13.0	////
TOTALS	30.6	35.3	22.7	10.0	.8	.2					100.0	5.5

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS (LST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.2	3.2	3.2	2.4							10.1	7.8
NNE	.3	.9	.8	.2							2.2	6.7
NE	.1	.4	.2								.8	5.4
ENE	.3	.7	.3	.1							1.4	5.3
E	.7	.9	.4		.2						2.2	6.0
ESE	1.6	1.1	.4	.1							3.2	4.5
SE	1.2	1.7	.9	.2							4.0	5.6
SSE	1.4	2.1	1.9	.4	.1						6.0	6.2
S	1.7	3.2	2.3	1.7	.1						9.0	6.8
SSW	1.2	2.6	1.1	.3							5.2	5.5
SW	1.4	3.1	.7	.3	.1						5.7	5.4
WSW	1.0	2.3	.3	.4							4.1	5.4
W	1.7	4.2	2.3	.9							9.1	6.2
WNW	.9	2.7	2.8	1.2	.1						7.7	7.4
NW	1.0	3.4	2.0	1.1	.2						7.6	7.1
NNW	.9	2.6	.8	.6	.1						4.9	6.2
VARIABLE												
COLM	////////////////////										16.6	////
TOTALS	16.7	35.1	20.6	10.1	1.0						100.0	5.3

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS(IST): 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.1	2.2	4.4	3.9	.3						12.0	9.1
NNE	.6	.9	1.6	.2							3.2	7.0
NE	.2	.3	.7	.1	.1						1.4	7.4
ENE	.6	.4	.6	.2							1.8	6.5
E	.3	.9	.4	.3							2.0	6.4
ESE	.8	.8	1.1	1.1							3.8	8.0
SE	.9	1.6	1.3								3.8	5.7
SSE	1.0	2.2	2.1	1.0	.1						6.4	7.1
S	1.9	3.6	3.6	2.8	.4						12.2	8.1
SSW	.4	1.1	1.2	.4	.1						3.3	7.7
SW	.7	1.4	1.1	.4	.2						4.0	7.5
WSW	.6	1.0	1.7	.6		.1					3.9	8.0
W	1.3	2.3	2.3	2.0	.1						8.1	7.8
WNW	.7	1.4	3.1	1.6	.3	.1					7.2	8.9
NW	.4	2.2	2.3	2.2	.6						7.8	9.0
NNW	.9	3.1	3.2	1.9	.1	.1					9.3	7.9
VARIABLE												
CALM	////////////////////										9.7	////
TOTALS	12.3	25.6	30.8	18.9	2.4	.3					100.0	7.2

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS(IST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.8	1.6	6.2	4.8	1.0	.1						14.4	10.2
NNE	.6	1.3	2.2	.9								5.0	7.9
NE	.3	.6	1.2	.3								2.4	7.2
ENE	.2	1.2	2.0	.1								3.6	7.2
E	.8	.8	.6	.6								2.7	6.8
ESE	.6	1.3	1.6	1.0	.1							4.6	8.0
SE	.9	1.0	1.7	1.2								4.8	8.1
SSE	.6	1.3	1.6	2.2	.3							6.0	9.7
S	.4	2.3	2.9	4.9	1.0							11.6	10.7
SSW	.1	1.1	1.1	.9	.4	.1						3.8	10.0
SW	.2	1.1	1.7	1.0	.2	.1						4.3	9.4
WSW	.4	.3	1.0	.7	.3							2.8	9.3
W	.8	1.0	1.7	2.8	.8							7.0	10.5
WNW	.7	1.1	1.7	2.2	.3	.1						6.1	9.9
NW	.6	1.6	2.6	2.8	.3	.2						8.0	9.9
NNW	.1	1.8	2.9	4.2	.8							9.8	10.9
VARIABLE													
CALM	////////////////////											3.2	////
TOTALS	8.0	19.4	32.4	30.6	5.7	.7						100.0	9.3

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS(LST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	56-63		
N	.2	1.1	4.6	5.1	.8	.1						11.9	11.2
NNE	.2	.9	1.8	1.0	.1							4.0	9.1
NE	.2	.6	1.6	.3								2.7	7.7
ENE	1.1	1.3	2.1									4.6	6.1
E	.4	.9	1.6	.1								3.0	6.9
ESE	.4	1.1	.7	.6	.1							2.9	7.4
SE	.4	.8	1.6	1.7	.3							4.8	10.0
SSE	.4	1.3	2.3	2.7	.7							7.4	10.3
S	.6	1.6	2.6	4.3	1.9	.4	.1					11.4	12.2
SSW		.4	.7	1.4	.3							2.9	11.7
SW	.1	.9	.7	1.2	.3	.1						3.3	10.4
WSW	.3	1.1	.8	1.4	.2							3.9	9.3
W	.7	1.7	1.8	2.8	1.2	.1						8.2	10.9
WNW	.3	1.1	1.9	3.2	1.1	.2						7.9	11.7
NW	.9	.8	2.3	3.4	1.3							8.8	11.4
NNW	.4	2.1	3.7	3.8	.8		.1					10.9	10.3
VARIABLE													
CALM	////////////////////											1.4	////
TOTALS	6.9	17.7	30.4	33.1	9.2	1.0	.2					100.0	10.2

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS(LST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS								TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40		
N	1.1	1.0	5.8	5.8	.7	.1			15.2	10.3
NNE	1.0	.7	2.1	1.1		.1			5.0	8.3
NE	.7	.7	1.2	.1					2.7	6.5
ENE	.6	1.6	1.1	.2					3.4	6.0
E	.4	.3	1.2						2.0	6.1
ESE		.8	1.0	.4					2.2	8.2
SE	.2	.8	2.0	.8	.1				3.9	8.7
SSE	.6	.7	2.9	4.3	.4	.2			9.1	11.1
S	.2	1.1	2.3	3.6	1.4	.6			9.2	12.6
SSW	.2	.3	1.4	2.1	.4	.3			4.9	11.8
SW	.3	.4	1.0	1.0		.1			2.9	9.7
WSW	.4	.7	.9	1.1	.3				3.4	9.8
W	.6	1.3	2.0	2.6	.4	.4			7.3	10.6
WNW	.7	.4	2.3	3.4	.7		.2		7.8	11.4
NW	.4	2.1	2.7	2.8	.9				8.9	10.1
NNW	.4	1.6	3.7	3.8	.6				10.0	10.4
VARIABLE										
CALM	////////////////////								2.0	////
TOTALS	7.9	15.2	33.7	33.1	6.0	1.4	.2		100.0	10.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS(IST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.6	2.7	4.6	4.1	.3	.1					13.3	9.0
NNE	.4	2.4	2.7	1.0	.4						7.0	8.3
NE	.3	1.6	1.1	.2		.1					3.3	7.1
ENE	1.2	1.3	.4	.4							3.4	5.7
E	1.3	2.1	1.3	.1							4.9	5.4
ESE	.7	1.3	.8								2.8	5.1
SE	1.1	2.0	2.4	.4	.1						6.1	6.7
SSE	.9	2.1	2.2	3.2	.1						8.6	9.1
S	.3	2.4	3.1	2.9	.7	.2					9.7	10.3
SSW	.3	1.3	1.7	.4		.2					4.0	8.3
SW	.2	1.6	.8	.6	.1	.1					3.3	8.0
WSW	.7	1.6	.8	.2							3.2	5.8
W	.4	2.4	2.0	1.4	.2	.1	.1				6.8	8.7
WNW	.8	1.4	2.1	1.4	.2	.4					6.4	9.3
NW	.1	1.3	1.8	1.2							4.4	8.7
NNW	.7	1.8	1.9	2.4	.3		.1				7.2	9.4
VARIABLE												
CALM	////////////////////////////////////										5.4	////
TOTALS	11.1	29.4	29.7	20.2	2.6	1.3	.2				100.0	7.8

TOTAL NUMBER OF OBSERVATIONS: 900



PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS(LST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL Σ	MEAN WIND	
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55			GE 56
0	1.3	3.3	3.0	2.0	.0							10.1	7.8
090	.9	1.8	1.4	.8								4.4	7.3
090	.9	.8	1.0	.1								2.3	6.2
180	.6	1.3	.3	.1								2.3	5.2
1	1.9	2.6	.7	.1								5.2	4.4
150	1.3	2.2	.4	.1								4.1	4.4
151	1.7	2.4	1.4	.4								6.0	5.7
150	.4	1.7	3.1	.6								5.8	7.5
1	1.6	4.2	3.1	2.4	.3	.1						11.8	7.8
150	1.3	2.7	.7	.3	.3							5.3	5.9
150	.6	1.1	1.1	.3								5.1	6.0
010	.6	2.7	1.0	.4								4.7	6.3
0	1.4	4.2	1.0	.3								7.0	5.2
090	.8	2.4	.4	.1	.4	.1	.1					4.4	7.4
00	1.2	2.1	.9	.4	.2	.4						5.3	7.7
000	1.0	1.7	1.6	.8	.1							5.1	7.1
000100000												10.9	////
10000	10.4	30.2	21.2	9.4	1.9	.7	.1					100.0	5.9

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GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS(1ST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	56-66	
N	1.0	2.3	4.3	3.6	.5	.1					11.8	9.3
NNE	.5	1.2	1.7	.8	.1	.0					4.2	8.0
NE	.3	.6	.9	.2	.0	.0					2.1	6.9
ENE	.7	1.0	.9	.2							2.8	6.1
E	.9	1.3	.9	.2	.0						3.2	5.7
ESE	.7	1.3	.8	.5	.0						3.3	6.4
SE	.9	1.6	1.6	.6	.1						4.7	7.0
SSE	.8	1.7	2.3	1.9	.2	.0					7.0	8.7
S	1.1	2.8	2.8	3.1	.7	.2	.0				10.8	9.4
SSW	.7	1.4	1.1	.8	.2	.1					4.3	8.0
SW	.6	1.7	1.0	.7	.1	.1					4.2	7.4
WSW	.7	1.7	1.0	.7	.1	.0					4.2	7.1
W	1.1	2.7	1.8	1.7	.4	.1	.0				7.9	8.2
WNW	.7	1.7	1.9	1.7	.4	.1	.0				6.7	9.2
NW	.8	2.1	2.0	1.8	.4	.1					7.3	8.9
NNW	.7	2.0	2.5	2.2	.4	.0	.0				7.9	9.0
VARIABLE												
CALM	////////////////////										7.8	////
TOTALS	12.2	27.1	27.7	20.7	3.7	.8	.1				100.0	7.7

TOTAL NUMBER OF OBSERVATIONS: 7200

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(IST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.2	2.7	1.4	.9	.3						6.5	7.2
NNE	.4	.5	.4	.1							1.5	5.4
NE	.5	.9	.2								1.6	4.1
ENE	.4	.8		.1							1.3	4.1
E	1.3	1.9		.1							3.3	4.2
ESE	.3	1.4	.2	.1	.1	.1					2.3	6.0
SE	.9	2.3	1.7	.2	.1						5.2	6.3
SSE	1.2	3.0	2.5	.4	.2						7.3	6.4
S	1.4	5.5	4.6	2.0							13.4	7.1
SSW	1.2	2.9	.9	.3							5.3	5.4
SW	2.3	4.0	.5	.1	.1						7.0	4.5
WSW	2.4	2.2	.9								5.4	4.3
W	1.7	4.1	1.2	.4	.1						7.5	5.3
WNW	1.2	2.0	.9	.2							5.1	5.0
WW	1.6	3.3	1.1	.4		.1					6.6	5.6
NNW	1.5	1.9	.9	.1							4.4	4.6
VARIABLE												
CALM	////////////////////										16.5	////
TOTALS	19.5	40.1	17.2	5.6	1.0	.2					100.0	4.6

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(EST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS								TOTAL	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40		
N	1.2	2.6	1.5	1.1					6.3	6.5
NNE	.5	.4	.8	.4					2.2	6.7
NE	.3	.8	.2						1.3	4.7
ENE	.6	.3	.4						1.4	4.4
E	.8	.4	.1	.1	.2				1.6	6.1
ESE	1.0	1.4	.4	.2					3.0	5.1
SE	.8	1.5	.9	.3					3.4	5.9
SSE	2.0	2.0	2.4	.6					7.1	6.2
S	1.4	5.1	4.4	1.7	.1				12.7	7.0
SSW	1.1	2.7	.6	.2					4.6	5.2
SW	2.7	2.8	.3	.1					5.9	4.1
WSW	2.5	2.9	.8						6.1	4.2
W	2.6	3.5	1.2	.3					7.6	4.9
WNW	2.0	3.8	1.6	.4					7.8	5.3
NW	1.6	2.8	1.4	.1	.1				6.0	5.1
NNW	1.8	3.5	1.0	.2		.1			6.7	5.0
VARIABLE										
CALM	////////////////////								16.1	////
TOTALS	22.9	36.6	18.0	5.9	.4	.1			100.0	4.6

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 75-87  
MONTH: JUL HOURS(IST): 0600-0600

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND	
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55			56-63
N	1.1	0.0	2.0	2.0	.2							11.1	7.5
NNE	.2	1.2	1.1	.0								2.9	7.1
NE	.0	.9	.1	.1								1.5	5.0
NNE	.6	.9	.3	.1								1.9	0.0
E	.5	.9	.0									2.2	5.1
ESE	.2	1.1	.9	.2		.1						2.5	7.3
SE	.0	1.9	1.6	.5								4.0	6.7
SSE	1.1	1.9	3.2	1.3								7.5	7.0
S	2.3	3.3	0.0	2.0								12.0	7.5
SSW	1.2	3.6	1.1	.0	.1							6.0	6.2
SW	1.0	2.7	1.1	.1	.1							5.0	5.2
WSW	1.7	1.7	.1	.2								3.0	0.1
W	3.0	3.5	1.0	.0	.1							9.7	5.0
WNW	1.2	1.9	1.5	.5	.1							5.3	6.2
NW	1.1	2.0	3.0	.0								7.3	6.7
NNW	1.0	3.2	1.6	1.1								6.9	6.7
VARIABLE													
CALM	////////////////////////////////////											10.1	////
TOTALS	10.2	33.2	25.0	11.9	.6	.1						100.0	5.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(157): 0900-1100

DIRECTION (DEGREES)	WIND SPEED (IN KNOTS)										TOTAL %	MEAN WIND	
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55			56-59
N	1.1	2.4	4.0	3.6	.5							11.7	9.1
NNE	1.3	1.7	2.3	.5								5.8	6.5
NE	1.1	1.7	1.2									4.0	5.3
ENE	1.3	1.3	.9	.1								3.6	4.8
E	.5	1.1	1.1	.1								2.8	6.2
ESE	.3	1.1	.8									2.2	5.6
SE	.4	1.2	1.7	1.2	.3							4.6	6.3
SSE	1.0	2.5	2.0	1.0	.5							7.0	6.6
S	1.0	2.7	4.1	4.0	1.1							14.5	9.7
SSW	.3	1.2	1.7	.9	.2	.1						4.2	9.3
SW	.5	.5	2.2	1.3	.2							4.7	9.0
WSW	.6	1.5	1.6									3.8	9.8
W	.9	1.8	2.3	.9	.8	.1						7.1	8.6
WNW	.4	1.1	2.3	.9	.2							4.8	8.6
W	1.0	1.9	2.0	1.2	.1							6.2	7.4
WNW	.5	1.0	2.0	1.9	.2							6.6	7.9
VARIABLE													
CALP	////////////////////////////////////											4.3	////
TOTALS	12.7	27.4	32.0	19.4	4.0	.2						100.0	7.7

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAF/AFAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUL MONTHS: 1511: 1700-1800

WIND SPEED IN KNOTS														
DIRECTION (DEGREES)	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	56-59	TOTAL	MEAN	
N	1.1	2.3	4.3	4.6	.2							17.5	9.4	
NNE	.6	1.5	1.8	.2								4.2	6.0	
NE	.3	1.6	.9	.3								3.1	6.4	
NNE	.9	2.2	.4	.2								3.7	5.6	
E	.5	1.5	.9	.5								3.4	6.0	
ESE	.4	.9	1.3									2.6	6.1	
SE	.6	1.6	1.0	.6	.4	.1						4.3	8.0	
SSE	.6	1.8	3.3	2.0	.8							8.6	9.7	
S	.8	1.7	3.9	4.8	2.2	.1						12.9	11.6	
SSW	.5	.9	1.6	2.7	.1							5.8	9.9	
SW	.5	.9	2.4	1.0	.1							4.9	8.3	
WSW	.6	.8	1.0	.1	.1							2.6	6.3	
W	1.1	1.4	1.6	2.2	1.2	.1						7.5	10.1	
WNW	.3	.8	1.3	2.3	.6							5.3	11.0	
W	.8	2.0	2.7	1.1	.4							7.0	7.4	
WNW	.5	3.0	2.9	1.9								8.4	8.0	
VARIABLE														
CALM	////////////////////////////////////												3.2	////
TOTALS	10.3	24.2	31.2	24.6	6.1	.1						100.0	8.6	

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY DIVISION      PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
USAFETAC      FROM HOURLY OBSERVATIONS  
AID WEATHER SERVICE/PAC

STATION NUMBER: 727575      STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUL      HOUR(S) 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55		
N	.2	1.3	4.0	4.3	.3							13.0	9.1
NNE	.3	1.4	1.9	1.0								4.6	8.0
NE	.0	1.4	1.1	.7								3.1	6.4
NNE	.5	.0	.3	.2								1.0	5.6
E	.0	1.5	1.0	.2								4.3	6.2
ESE	.0	1.1	1.7	.1								3.7	6.1
SE	1.2	1.1	1.1	.6								3.0	6.0
SSE	.5	1.5	1.0	2.0	.0	.1						7.7	10.3
S	.9	2.2	4.1	4.9	1.1	.4						13.5	10.9
SSW	.3	1.0	2.2	1.7	.3							6.1	9.0
SW	.1	.0	.0	.6								2.3	8.6
WSW	.5	.6	1.1	.6	.2							3.1	8.5
W	1.1	1.4	2.5	1.3	1.0							7.2	9.0
WNW	.0	1.3	2.3	1.9	.9	.1						7.0	10.5
W	.0	2.0	2.0	1.4	.4							6.7	8.5
WNW	1.2	2.4	2.4	2.4								8.3	8.1
VARIOUS													
CALM	////////////////////////////////////											3.5	////
TOTALS	9.0	20.3	32.3	24.4	5.1	.6						100.0	8.6

TOTAL NUMBER OF OBSERVATIONS: 930



GLOBAL CLIMATOLOGY BRANCH  
V/SAFE/AC  
AFB WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(1ST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	1.0	3.0	4.9	2.6	.2		.1					13.4	8.0
NNE	.0	1.0	2.0	1.0								5.6	7.4
NL	.0	1.0	1.1									3.0	5.5
ENE	1.3	1.0	.5	.4								4.1	5.2
E	1.5	2.9	.6	.5								5.6	5.4
ESE	.9	1.4	1.3	.2								3.8	5.8
SE	.4	1.9	2.0	.9	.1							5.4	7.6
SSE	.0	2.3	4.6	2.3	.3							10.2	8.7
S	.6	2.2	4.9	2.4	.2							10.2	9.0
SSW	.3	1.3	1.5									3.1	6.2
SW	.4	1.2	.0									2.4	5.4
WSW	.4	.0	.3	.3	.1							1.9	7.1
W	1.6	2.4	1.4	.5	.3							6.3	6.3
WNW	1.4	1.7	1.4	1.4		.1						6.0	7.6
NW	1.5	1.1	1.9	.3	.1							5.0	6.5
NNW	1.3	2.0	1.2	1.3	.4							7.0	7.3
VARIABLE													
CALM	////////////////////											6.1	////
TOTALS	15.9	31.3	30.5	14.1	1.0	.1	.1					100.0	6.0

TOTAL NUMBER OF OBSERVATIONS: 927

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(IST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	1.7	2.6	1.6	1.0	.3							7.2	6.8
NNE	.8	1.1	1.3	.1								3.2	6.6
NE	.5	1.6	.6	.1								2.9	5.5
ENE	.9	1.5	.3									2.7	4.2
E	.4	2.6	1.2	.2								4.4	5.9
ESE	1.3	2.2	1.1		.2							4.7	5.5
SE	.4	2.6	1.3	.3								4.6	6.2
SSE	1.7	2.8	3.0	1.0								9.3	6.7
S	2.0	4.1	3.5	1.7	.2							12.3	6.8
SSW	1.6	2.2	1.2									5.0	4.9
SW	1.2	1.8	.8	.2								4.0	5.2
WSW	1.7	2.4	.3	.1	.1							4.6	4.4
W	2.7	2.7	1.1	.3								6.8	4.6
WNW	2.0	2.2	.4									4.6	3.8
NW	1.1	2.2	.8	.1								4.1	4.8
NNW	1.7	1.7	1.1	.3	.2							5.2	5.9
VARIABLE													
CALM	////////////////////											14.1	////
TOTALS	22.7	36.1	20.3	5.5	1.1							100.0	4.9

TOTAL NUMBER OF OBSERVATIONS: 927

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(1ST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	1.2	3.0	3.2	2.6	.3		.0					10.2	8.2
NNE	.6	1.2	1.5	.5								3.7	6.9
NE	.6	1.3	.7	.1								2.7	5.5
ENE	.8	1.2	.3	.1								2.5	4.9
E	.8	1.6	.8	.2	.0							3.5	5.7
ESE	.6	1.3	1.0	.1	.0	.0						3.1	6.0
SE	.7	1.8	1.4	.6	.1	.0						4.5	7.1
SSE	1.1	2.2	3.0	1.5	.3	.0						8.2	8.1
S	1.5	3.3	4.2	3.2	.6	.1						12.8	8.7
SSW	.8	1.8	1.1	.8	.1	.3						4.8	7.1
SW	1.1	1.8	1.1	.4	.1							4.6	6.0
WSW	1.3	1.6	.8	.2	.1							3.9	5.2
W	1.9	2.6	1.7	.4	.4	.3						7.5	6.7
WNW	1.1	1.9	1.5	1.0	.2	.0						5.7	7.3
NW	1.2	2.2	1.9	.7	.1	.0						6.1	6.7
NNW	1.2	2.8	1.6	1.2	.1	.0						6.9	6.9
VARIABLE													
CALM	////////////////////											9.3	////
TOTALS	16.5	31.7	25.9	13.4	2.5	.2	.0					100.0	6.5

TOTAL NUMBER OF OBSERVATIONS: 7434

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG HOURS(LST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	1.8	3.2	2.3	.8								8.1	6.0
NNE	.2	1.1	.2									1.5	5.3
NE	.3	1.3	.2	.1								1.9	5.1
ENE	1.1	.5	.2	.1								1.9	4.1
E	.5	1.1	.8	.1								2.5	5.6
ESE	.2	.8	.8	.1								1.8	6.6
SE	.9	2.6	1.1	.4								4.9	5.9
SSE	1.2	2.5	2.4	1.1	.1							7.2	7.1
S	1.9	4.0	4.0	1.6	.1							11.6	6.9
SSW	1.2	3.4	1.0	.8								6.3	6.0
SW	1.4	1.9	1.1									4.4	4.7
WSW	1.0	2.3	.4	.4								4.1	5.5
W	1.6	4.0	1.3	.5								7.4	5.4
WNW	1.0	2.8	.8	.1	.1		.1					4.8	5.9
NW	1.7	3.1	1.2	.5	.2	.1						6.9	6.0
NNW	2.0	2.9	1.6	.1								6.7	5.0
VARIABLE													
CALM	////////////////////											17.8	////
TOTALS	18.1	37.4	19.1	6.8	.5	.1	.1					100.0	4.9

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
LSAPETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG HOURS(EST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-24	27-27	28-33	34-40	41-47	48-55	56-64		
N	1.1	3.4	2.4	.4								7.3	6.0
NNE	.3	.2	.2									.8	5.0
NE	.5	.5	.1									1.2	4.0
ENE	.3	.2	.3	.1								1.0	5.0
E	.6	1.4	.6									2.7	5.3
ESE	.5	1.2	.5	.2								2.5	5.7
SE	.6	1.9	1.0	.2								3.8	6.0
SSE	1.9	3.2	1.0	.5	.2	.1						7.8	6.3
S	1.1	3.4	4.1	.6								9.2	6.8
SSW	1.1	1.2	1.2	.2								3.7	5.9
SW	.9	1.7	1.4									4.0	5.4
WSW	1.4	2.8	.4	.4								5.1	5.1
W	2.2	4.0	1.6	.9	.1	.1						8.8	6.3
WNW	1.5	2.4	1.6	.6	.1	.2						6.5	6.4
NW	1.7	4.0	1.1	.5								7.3	5.2
NNW	2.7	3.9	.6	.6	.1							8.0	5.2
VARIABLE													
CALM	////////////////////											20.5	////
TOTALS	18.5	35.5	19.0	5.5	.5	.4						100.0	4.7

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG HOURS(LST): 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	1.2	4.0	4.1	.8								10.0	6.6
NNE	.8	1.1	.3	.1	.1							2.4	5.5
NL	.3	.4	.3									1.1	4.9
ENE	.6	1.1	.2									1.9	4.5
E	.9	1.3	.5	.2								2.9	5.4
ESE	.3	1.1	1.3	.1								2.8	6.4
SE	.6	1.9	1.1	.4	.1							4.2	6.5
SSE	1.3	2.0	2.3	.5		.1						6.2	6.6
S	1.0	3.2	5.5	2.3		.2						13.0	7.7
SSW	.8	1.3	1.8	.3								4.0	6.7
SW	1.3	1.2	.5	.1								3.1	4.7
WSW	.6	1.8	1.2	.6	.1							4.4	7.1
W	1.4	2.0	1.9	1.0	.1							7.0	6.9
WNW	1.6	2.8	2.4	1.0	.1							7.8	6.7
NW	1.0	2.4	1.9	1.1	.1							6.5	7.5
NNW	1.9	3.0	1.9	1.2								8.1	6.2
VARIABLE													
CALM	////////////////////											14.6	////
TOTALS	17.0	30.4	27.3	9.7	.6	.3						100.0	5.7

TOTAL NUMBER OF OBSERVATIONS: 950

AD-A187 845 GRAND FORKS AIR FORCE BASE NORTH DAKOTA REVISED UNIFORM 2/7

SUMMARY OF SURFAC. (U) AIR FORCE ENVIRONMENTAL

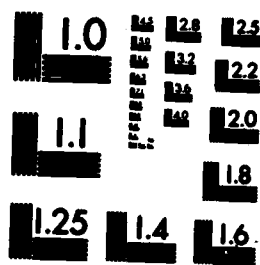
TECHNICAL APPLICATIONS CENTER SCOTT A. HOU 87

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USAFETAC/DS-87/873

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MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-84  
MONTH: AUG HOURS(LST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND SPEED
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	1.7	2.8	4.6	2.7	.1							11.9	1
NNE	1.0	1.9	2.4	.8								6.0	6
NE	.6	.9	.5	.2								2.3	5
ENE	.6	1.3	.1	.1								2.2	4
E	.6	1.5	1.1	.1								3.3	6
ESE	.6	1.0	1.0	.9								3.4	7
SE	.9	1.8	.9	1.0								4.5	7
SSE	1.3	1.8	2.0	2.2	.1							8.2	8
S	.9	1.6	6.5	4.8	.3	.3						14.4	10
SSW	.3	.8	2.7	1.7			.1					5.4	9
SW	.2	.6	1.1	.3	.1							2.4	8
WSW	.2	1.4	.9	.5								3.0	6
W	.9	1.9	1.9	1.7	.6	.1						7.2	9
WNW	.3	.8	1.5	1.6	.6							4.8	10
NW	1.0	1.7	1.8	2.2	.4							7.1	8
NNW	.6	1.7	2.6	2.3	.5							7.7	9
VARIABLE													
CALM	////////////////////											5.9	///
TOTALS	11.8	23.5	32.3	23.0	2.9	.4	.1					100.0	7

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG HOURS(LST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.8	2.9	4.6	5.3		.1						13.7	9.
NNE	1.0	1.0	1.4	.3	.1							3.8	6.
NE	.6	1.7	.5	.2								3.1	5.
ENE	.5	1.0	1.3									2.8	6.
E	.2	1.7	1.7	.6								4.3	7.
ESE	.4	1.1	1.1	.9								3.4	7.
SE	.3	.8	1.2	1.5	.1							3.9	9.
SSE	.3	1.1	1.7	2.2	.6	.1						6.0	10.
S	.6	2.5	4.9	5.6	.9	.2						14.7	10.
SSW	.1	1.0	2.0	2.0	.4							5.6	10.
SW	.2	.4	1.1	.6	.1							2.5	8.
WSW	.3	1.1	1.2	1.2								3.8	8.
W	.9	1.7	1.2	1.2	.4	.1						5.5	8.
WNW	.3	1.0	1.5	1.9	1.6	.4						6.8	12.
NW	.4	2.0	1.8	2.3	.1	.1						6.8	8.
NNW	.9	1.4	2.5	3.0	.6							8.4	9.
VARIABLE													
CALM	////////////////////////////////////											5.1	////
TOTALS	8.0	22.3	29.8	28.8	5.1	1.1						100.0	8.

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG HOURS (LST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS								TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40		
N	1.5	2.3	8.1	4.0	.1	.1			16.0	8.
NNE	1.0	1.5	1.9	.6					5.1	6.
NE	.6	1.2	.6	.3					2.8	5.
ENE	.6	.6	.6						1.9	5.
E	.1	1.5	2.3	.6					4.5	7.
ESE	.3	.9	1.5	.8	.1				3.5	8.
SE		1.5	1.2	1.3	.2	.1			4.3	9.
SSE	.3	1.2	2.3	1.2	.4	.1			5.5	9.
S	1.0	1.6	4.5	5.7	1.8	.3			14.9	11.
SSW	.2	.8	1.1	1.5	.3	.2			4.1	10.
SW	.3	.3	1.1	.8	.1				2.6	9.
WSW	.2	1.2	1.8	.5					3.8	7.
W	.6	1.8	1.1	1.1	.3				4.9	8.
WNW	.6	1.6	2.0	1.6	.2	.1			6.2	9.
NW	.4	.9	2.2	2.2	.8				6.3	10.
NNW	1.0	1.8	3.3	2.7	1.2	.1			10.1	9.
VARIABLE										
CALM	////////////////////								3.3	////
TOTALS	8.9	20.6	35.6	24.8	5.6	1.1			100.0	8.

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG HOURS(IST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	56-66	
N	1.6	4.9	5.1	2.6	.2						14.4	7.6
NNE	1.1	2.2	1.7	.2	.1						5.3	6.2
NE	1.0	1.7	.5	.4							3.7	5.3
ENE	1.3	2.6	.5	.3							4.7	4.9
E	1.8	2.4	1.6	.2							6.0	5.1
ESE	.4	1.4	2.2	.6							4.6	7.5
SE	.4	1.1	1.0	1.0	.2						3.7	8.4
SSE	1.0	2.6	3.4	2.0	.5						9.6	8.5
S	.6	2.6	3.7	3.3	.4						10.6	9.1
SSW	.3	1.1	1.0	.9	.1						3.3	8.3
SW	.5	1.3	.4	.1		.1					2.5	6.2
WSW	.8	.8	.3	.1							1.9	5.1
W	1.4	1.6	.6	.5							4.2	5.4
WNW	.8	1.4	1.1	1.0							4.2	7.2
NW	.3	1.8	.8	.9	.1	.1					4.0	8.1
NNW	1.1	2.4	2.2	1.5	.1						7.2	7.7
VARIABLE												
CALM	////////////////////										10.1	////
TOTALS	14.4	31.7	26.0	15.7	1.8	.2					100.0	6.5

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG HOURS(LST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.4	4.1	1.4	1.1		.1					8.1	6.5
NNE	1.1	1.7	.8	.1							3.7	5.3
NE	1.4	1.2	.2								2.8	3.7
ENE	1.5	1.4	.1	.1							3.1	3.9
E	1.7	1.8	.9	.3							4.7	5.0
ESE	1.0	1.7	1.1	.5							4.3	6.3
SE	.5	2.6	1.6	.9	.4						6.0	7.8
SSE	1.2	2.2	3.2	1.6							8.2	7.4
S	1.5	2.5	4.6	2.6	.1						11.3	8.2
SSW	1.0	1.6	1.0	.2	.1						3.9	5.9
SW	1.5	2.0	.5								4.1	4.3
WSW	.5	1.5	.2								2.3	4.3
W	2.3	3.3	.8	.3							6.7	4.6
WNW	.8	1.4	.9	.1							3.1	5.3
NW	1.2	1.3	1.3	.6	.1						4.5	6.8
NNW	1.8	1.8	1.6	.6	.2						6.1	6.5
VARIABLE												
CALM	////////////////////										17.2	////
TOTALS	20.3	32.2	20.1	9.1	1.0	.1					100.0	5.1

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG HOURS(LST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS								TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40		
N	1.4	3.5	4.1	2.2	.1	.0			11.2	7.7
NNE	.8	1.3	1.1	.3	.0				3.5	6.2
NE	.7	1.1	.4	.2					2.4	5.1
ENE	.8	1.1	.4	.1					2.4	4.8
E	.8	1.6	1.2	.3					3.9	5.9
ESE	.5	1.1	1.2	.5	.0				3.3	7.2
SE	.5	1.8	1.1	.8	.1	.0			4.4	7.5
SSE	1.1	2.1	2.5	1.4	.3	.1			7.3	8.0
S	1.2	2.7	4.7	3.3	.5	.1			12.5	9.0
SSW	.6	1.4	1.5	1.0	.1	.0	.0		4.6	8.0
SW	.8	1.2	.9	.2	.0	.0			3.2	6.1
WSW	.6	1.6	.8	.5	.0				3.5	6.4
W	1.5	2.6	1.3	.9	.2	.0			6.5	6.8
WNW	.9	1.8	1.5	1.0	.3	.1	.0		5.5	8.2
NW	1.0	2.2	1.5	1.3	.2	.0			6.2	7.7
NNW	1.5	2.4	2.0	1.5	.3	.0			7.8	7.6
VARIABLE										
CALM	////////////////////////////////////								11.8	////
TOTALS	14.6	29.2	26.2	15.4	2.3	.5	.0		100.0	6.6

TOTAL NUMBER OF OBSERVATIONS: 7440

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: SEP HOURS(LST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.8	2.9	3.3	2.3							9.3	8.3
NNE	.9	1.2	.8	.9							3.8	7.3
NE	.3	.4	.3								1.1	4.9
ENE	.9	.9	.7	.1	.1						2.7	5.9
E	.6	.4	.1	.2	.4						1.8	8.9
ESE	.6	1.3	.7	.9							3.4	7.0
SE	.4	1.9	.9	.3							3.6	6.5
SSE	.4	2.2	2.2	1.2							6.1	7.8
S	1.4	4.6	3.0	2.2	.2						11.4	7.4
SSW	.8	1.7	1.3	1.0	.1						4.9	7.8
SW	1.1	3.3	.9	.1							5.4	5.0
WSW	2.3	2.7	1.3	.2	.2						6.8	5.5
W	1.6	3.9	1.8	.1	.1						7.4	5.5
WNW	.3	2.7	2.1	1.1	.2	.3					6.8	8.6
NW	.9	2.4	2.0	.8		.3					6.4	7.6
NNW	2.1	.9	1.8	.8							5.6	6.0
VARIABLE												
CALM	////////////////////////////////////										13.4	////
TOTALS	15.4	33.4	23.2	12.3	1.4	.7					100.0	6.1

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: SEP HOURS(IST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.1	2.8	3.8	2.6							10.2	8.0
NNE	.6	1.8	.7	.6							3.6	6.6
NE	.8	.8	.4								2.0	4.1
ENE	.3	.3	.2	.2							1.1	6.0
E	.2	1.2	.7	.1	.3						2.6	8.2
ESE	.6	1.0	.3	.8							2.7	7.0
SE	.8	1.4	.6	.3	.1						3.2	6.2
SSE	.3	3.7	2.9	.8	.1						7.8	7.1
S	1.1	3.2	4.2	.8	.3						9.7	7.1
SSW	1.1	2.3	1.3	.4	.1						5.3	6.3
SW	1.1	3.3	1.4	.2							6.1	5.3
WSW	1.6	2.1	1.0	.3	.1						5.1	5.5
W	1.2	4.6	2.7	.6							9.0	6.1
WNW	.7	2.8	2.4	.9	.2	.1					7.1	7.7
NW	1.9	1.9	2.2	.4		.2	.1				6.8	6.9
NNW	1.6	1.6	1.6	1.3	.1		.1				6.2	7.4
VARIABLE												
CALM	////////////////////										11.6	////
TOTALS	14.9	34.8	26.4	10.3	1.4	.3	.2				100.0	6.0

TOTAL NUMBER OF OBSERVATIONS: 900



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: SEP HOURS (LST): 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.1	3.2	4.8	2.4							11.6	7.9
NNE	.3	1.2	1.2	.8	.1						3.7	7.8
NE	.2	.6	.7								1.4	6.2
ENE	.3	1.0	.8		.1						2.2	6.2
E	.3	1.0	.8	.4	.1						2.7	7.7
ESE	.6	1.2	.8	.7							3.2	7.1
SE	.4	1.3	1.1	.4							3.3	7.1
SSE	.3	1.7	2.2	1.9	.4						6.6	9.3
S	1.1	2.8	4.2	1.9	.1	.1					10.2	8.2
SSW	.4	1.1	1.0	.1	.1						2.8	6.8
SW	.7	1.9	.9	.1							3.6	5.4
WSW	1.2	2.7	1.7	.1	.1						5.8	5.9
W	1.6	3.8	3.0	1.2	.1	.1					9.8	6.9
WNW	1.4	2.4	3.0	1.6	.1	.3					8.9	8.0
NW	1.1	1.9	2.8	.6	.2	.3					6.9	7.9
NNW	1.7	1.8	2.1	1.1							6.7	6.8
VARIABLE												
CALM	////////////////////										10.8	////
TOTALS	12.9	29.6	31.0	13.3	1.6	.9					100.0	6.6

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: SEP HOURS(LST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	1.9	2.6	5.6	5.1	.4	.1						15.7	9.3
NNE	.3	1.0	1.6	1.7								4.6	8.7
NE	.6	.9	1.2	.1								2.8	6.0
ENE	.2	.7	1.1	.4								2.4	7.6
E	1.0	1.0	1.8	.8	.3							4.9	7.9
ESE	.2	1.1	1.3	.1								2.8	7.0
SE	.8	.8	1.8	1.1	.2							4.7	8.9
SSE	.2	1.9	1.9	1.8	.9							6.7	9.9
S	.4	1.4	3.2	5.8	1.1	.4						12.4	11.8
SSW	.8	.4	1.6	1.8	.1							4.7	9.3
SW	.3	.7	.9	.9	.2							3.0	9.4
WSW	.1	.8	1.6	.9	.2							3.6	9.3
W	.3	.4	2.4	2.0	.8	.4						6.4	11.6
WNW	.2	1.0	2.9	1.8	.6	.2						6.7	10.3
NW	.9	1.6	2.3	2.4	1.2	.2	.1					8.8	10.9
NNW	1.1	1.6	2.2	2.2								7.1	8.1
VARIABLE													
CALM	////////////////////											2.9	////
TOTALS	9.4	17.8	33.3	28.9	6.1	1.4	.1					100.0	9.4

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: SEP HOURS(LST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	1.1	2.3	5.1	4.6	.6							13.7	9.4
NNE	.7	.4	1.3	2.1	.2							4.8	9.9
NE	.4	.8	.6	.2								2.0	5.9
ENE	.3	.2	1.6	.8								2.9	9.0
E	.4	1.6	3.0	1.1	.1							6.2	8.3
ESE	.4	.7	1.1									2.2	6.4
SE	.3	.8	.9	1.1	.2							3.3	9.5
SSE	.4	.3	2.8	2.0	1.4	.3						7.3	12.1
S		.9	2.7	5.7	1.9	.7	.1					11.9	13.7
SSW	.3	.6	1.6	1.2	.3							4.0	10.4
SW	.2	.7	.8	.9								2.6	8.4
WSW	.1	1.2	2.1	1.1	.3	.2						5.1	10.0
W	.8	1.2	3.0	2.8	.8	.7						9.2	11.0
WNW	.4	.3	1.9	2.3	1.0	.4						6.4	12.2
NW	.4	.9	2.2	2.4	.7	.1	.1					6.9	10.8
NNW	.8	1.9	3.2	2.8	.3	.1						9.1	9.5
VARIABLE													
CALM	////////////////////											2.3	////
TOTALS	7.3	14.9	33.8	31.1	7.9	2.6	.2					100.0	10.2

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: SEP HOURS(LST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.1	3.6	5.1	4.3	1.3						15.4	9.8
NNE	.4	.9	1.8	1.4	.2						4.8	9.4
NE	.2	.7	1.2	.7				.1			2.9	9.5
ENE	.4	1.1	1.3	.4			.1				3.4	8.4
E	.7	.9	2.2	1.6							5.3	8.4
ESE	.3	.4	1.6	.3							2.7	7.7
SE	.3	.9	.9	1.2	.2						3.6	9.2
SSE	.3	1.1	2.6	3.2	.3	.2					7.8	11.2
S	.7	.9	1.6	4.2	2.3	.8	.1				10.6	13.6
SSW	.1	.6	.9	.6	.3						2.4	10.0
SW	.1	.7	1.2	.4	.1						2.6	9.0
WSW	.6	1.3	1.2	1.1		.1					4.3	8.4
W	.2	2.3	2.4	2.1	1.1	.2					8.4	10.7
WNW	.6	1.1	2.2	2.1	.8	.2					7.0	10.5
NW	.4	1.4	2.4	2.0	.6	.1					7.0	10.0
NNW	.6	1.4	3.3	1.9	.9	.2					8.3	10.1
VARIABLE												
CALM	////////////////////										3.4	////
TOTALS	7.1	19.3	32.0	27.7	8.2	1.9	.2	.1			100.0	9.8

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: SEP HOURS (LST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	1.4	2.9	2.7	3.0	.3	.2						10.6	8.
NNE	.9	2.2	2.6	1.6								7.2	7.
NE	.4	1.9	1.0	.3								3.7	6.
ENE	1.1	1.0	1.8	.3		.1	.2					4.6	7.
E	.7	2.6	1.3	.6	.1							5.2	6.
ESE	.3	1.7	1.0	.2								3.2	6.
SE	.2	2.6	2.0	.6								5.3	7.
SSE	.4	3.0	3.4	1.9	.6							9.3	8.
S	.9	2.7	2.6	2.4	.2							8.8	8.
SSW	.7	.9	.4	.1	.1							2.2	5.
SW	.9	1.3	.2									2.4	4.
WSW	.4	2.7	.4		.1							3.7	5.
W	1.4	3.1	.7	1.0	.3	.1						6.7	7.
WNW	1.3	1.4	.8	.9	.4	.3						5.2	8.
NW	.7	1.7	1.0	1.6	.6							5.4	9.
NNW	.9	1.7	2.6	2.2	.1							7.4	8.
VARIABLE													
CALM	////////////////////											9.0	////
TOTALS	12.8	33.2	24.4	16.7	2.9	.8	.2					100.0	7.

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: SEP HOURS(IST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	56-66	
N	.6	3.0	2.9	2.6	.2	.1					9.3	8.
NNE	.4	1.0	1.8	1.2	.2						4.7	8.
NE	.6	1.4	.7	.4	.1						3.2	6.
ENE	.3	1.3	.8	.1							2.6	5.
E	1.4	1.1	1.3	.1	.3						4.3	6.
ESE	.8	.8	1.1	.1							2.8	6.
SE	.3	2.1	1.8	.7							4.9	7.
SSE	.6	2.4	3.1	1.6							7.7	7.
S	1.1	3.6	2.1	3.2	.6						10.6	8.
SSW	.9	2.1	.3	.1	.2						3.7	5.
SW	.8	3.4	.4								4.7	4.
WSW	1.0	2.3	1.1	.1	.2						4.8	6.
W	2.1	3.4	1.0		.3	.2					7.1	5.
WNW	.3	2.6	1.6	.7		.3					5.4	7.
NW	1.1	1.9	1.1	1.0	.2						5.3	7.
NNW	1.0	1.4	1.3	.9							4.7	6.
VARIABLE												
CALM	////////////////////										14.3	////
TOTALS	13.3	34.0	22.4	12.8	2.4	.7					100.0	6.

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: SEP HOURS(LST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	1.1	2.9	4.2	3.4	.4	.1						12.0	8.9
NNE	.6	1.2	1.5	1.3	.1							4.6	8.4
NE	.4	.9	.8	.2	.0			.0				2.4	6.4
ENE	.5	.8	1.0	.3	.0	.0	.0					2.7	7.3
E	.7	1.2	1.4	.6	.2							4.1	7.7
ESE	.5	1.0	1.0	.4								2.9	6.8
SE	.5	1.5	1.2	.7	.1							4.0	7.7
SSE	.4	2.0	2.6	1.8	.5	.1						7.4	9.2
S	.8	2.5	2.9	3.3	.8	.2	.0					10.7	10.0
SSW	.6	1.2	1.1	.7	.2							3.7	7.7
SW	.7	1.9	.8	.3	.0							3.8	6.0
WSW	.9	2.0	1.3	.5	.2	.0						4.9	6.9
W	1.2	2.8	2.1	1.2	.4	.2						8.0	8.1
WNW	.7	1.8	2.1	1.4	.4	.3						6.7	9.1
NW	.9	1.7	2.0	1.4	.4	.2	.0					6.7	9.0
NNW	1.2	1.5	2.3	1.7	.2	.0	.0					6.9	8.1
VARIABLE													
CALM	////////////////////////////////////											8.5	////
TOTALS	11.7	27.1	28.3	19.1	4.0	1.2	.1	.0				100.0	7.7

TOTAL NUMBER OF OBSERVATIONS: 7200

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: OCT HOURS(IST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS							TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33		
N	.5	1.1	2.2	2.7	.5	.1		7.1	10.3
NNE	.1	.2	.1	.8	.3			1.5	12.1
NE	.1	.6	.8	.3				1.8	7.8
ENE	.8	.9	.3	.1				2.0	4.7
E	.6	1.1	.1					1.8	4.3
ESE	.3	.9	.3					1.5	5.1
SE	.2	1.0	.4	.3				1.9	7.2
SSE	.8	1.7	2.2	1.8	.6			7.1	9.2
S	.5	3.8	5.8	3.1	1.5			14.7	9.5
SSW	.6	3.0	1.2	.3	.1			5.3	6.3
SW	1.1	3.7	1.8			.2		6.8	6.0
WSW	1.1	1.7	.9	.5	.2			4.4	7.0
W	1.0	4.4	3.1	1.6		.1		10.2	7.4
WNW	1.3	2.5	2.7	1.3	.1	.1		8.0	7.7
NW	1.7	1.7	3.3	1.9				8.7	7.5
NNW	.4	1.6	3.4	2.0	.9	.5		8.9	10.6
VARIABLE									
CALM	////////////////////							8.2	////
TOTALS	11.2	29.8	28.6	16.9	4.3	1.1		100.0	7.5

TOTAL NUMBER OF OBSERVATIONS: 930



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: OCT HOURS(IST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.2	1.1	2.2	2.9	1.1	.1					8.5	10.4
NNE	.1	.4	.6	.6	.2	.1					2.2	11.2
NE	.5	.3	.3	.2							1.4	5.8
ENE	.1	.5	.2	.1							1.0	6.4
E	.1	1.0	.5	.1							1.7	6.3
ESE	.3	.9	.1								1.3	4.9
SE	.3	1.2	.4	.2	.1						2.3	6.7
SSE	1.2	1.7	2.6	2.6	.1						8.2	8.8
S	.5	3.1	7.0	3.2	.6						14.5	9.0
SSW	.9	2.2	1.2	.8							4.9	6.5
SW	1.1	2.3	.9	.1		.2					4.5	6.3
WSW	.8	1.7	1.2			.1					3.8	6.1
W	1.2	4.1	2.8	2.5	.6						11.2	8.3
WNW	1.0	3.3	3.8	1.0	.1						9.1	7.2
NW	.8	2.8	2.8	1.8	.1	.1					8.4	8.1
NNW	.4	2.0	3.1	2.3	.4						8.3	9.3
VARIABLE												
CALM	////////////////////										8.8	////
TOTALS	10.4	28.6	29.7	18.4	3.4	.6					100.0	7.5

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: OCT HOURS(LST): 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL Σ	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.4	1.4	3.4	4.3	1.4	.1						11.1	11.3
NNE	.1	.6	.8	.3								1.8	7.8
NE	.2	.1	.3	.2								.9	7.6
ENE	.4	.9	.1	.1								1.5	5.4
E	.6	.3	.8	.1								1.8	6.0
ESE	.6	.5										1.2	4.0
SE	.5	1.3	.5	.3								2.7	6.3
SSE	1.4	2.3	3.2	2.7	.9							10.4	9.1
S	1.5	4.1	5.6	3.1	.3	.1						14.7	8.2
SSW	.4	1.2	1.5	.2								3.3	6.7
SW	.9	1.7	1.6	.2		.1						4.5	6.4
WSW	.5	1.9	1.4	.4								4.3	6.7
W	2.5	4.2	4.0	1.6	.2							12.5	7.0
WNW	.6	2.9	1.9	1.2	.4		.1					7.2	8.4
NW	.6	1.7	3.3	1.6	.3							7.6	8.5
NNW	.3	1.7	1.9	3.1	.9	.1						8.1	10.4
VARIABLE													
CALM	////////////////////											6.3	////
TOTALS	11.8	26.9	30.4	19.6	4.4	.4	.1					100.0	7.8

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: OCT HOURS(LST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.1	1.4	3.0	5.8	2.4	.8					13.4	12.9
NNE	.1	.3	1.3	1.0							2.7	9.9
NE	.8	.4	.3	.3							1.8	5.9
ENE	.6	.5	.4	.1							1.7	5.4
E	.4	.6	1.2	.1							2.4	6.5
ESE		.3	.3	.3							1.0	9.2
SE	.4	.8	.6	.6							2.5	7.5
SSE	.3	1.0	2.5	3.1	1.5	.3					8.7	12.0
S	.5	1.3	5.2	7.1	1.3	.1	.1				15.6	11.6
SSW	.2	1.6	2.4	1.6	.2	.1					6.1	9.4
SW	.8	1.0	1.3	1.2							4.2	8.0
WSW	.8	.5	1.8	1.3	.3						4.7	9.0
W	.6	1.9	1.8	2.2	.4						7.0	9.1
WNW	.6	1.2	1.8	2.3	.6	.1					6.7	10.2
NW	.4	1.0	3.2	2.8	1.4	.2	.2				9.2	11.8
NNW	.4	1.6	2.9	3.1	1.8	.2					10.1	11.6
VARIABLE												
CALM	////////////////////////////////////										2.2	////
TOTALS	7.2	15.5	30.1	32.9	10.0	1.8	.3				100.0	10.4

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: OCT HOURS(IST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.4	1.2	3.0	7.3	2.4	.2	.1				14.6	12.7
NNE	.1	.8	1.2	1.2							3.2	9.7
NE	.1	.4	.4	.5							1.5	9.1
ENE		1.3	.4	.2							1.9	6.8
E	.5	.9	.6	.4							2.5	7.0
ESE		1.0	.2	.3							1.5	7.5
SE	.1		1.2	.3	.1						1.7	9.1
SSE	.1	.9	1.5	2.8	1.8	.9					8.0	13.9
S	.3	1.2	3.5	6.8	2.5	.8	.2				15.3	13.0
SSW	.2	.4	1.8	2.0	.6	.2					5.4	11.7
SW	.1	.8	2.2	2.6	.1						5.7	10.6
WSW	.2	.6	1.3	1.7	.2						4.1	10.6
W	.2	.5	3.1	2.6	.5						7.0	10.8
WNW	.4	.8	1.5	2.8	1.2	.3					7.0	11.9
NW	.5	.9	2.8	2.2	1.5	.6	.1				8.6	12.5
NNW	.2	1.4	1.7	4.2	1.6	.5	.1				9.8	13.2
VARIABLE												
CALM	////////////////////										2.3	////
TOTALS	3.7	12.9	26.6	38.0	12.6	3.5	.5				100.0	11.6

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: OCT HOURS(LST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.2	1.8	4.4	8.1	1.7	.2	.3				16.8	12.4
NNE	.2	.8	1.2	.9							3.0	8.8
NE	.1	.9	.6	.9	.1						2.6	9.6
ENE	.3	.8	.5	.2							1.8	6.5
E	.4	.8	1.0	.3							2.5	6.8
ESE	.1	.8	.4	.1							1.4	6.2
SE	.1	1.0	.9	.8	.1						2.8	8.7
SSE	.1	1.4	1.9	3.2	1.4	1.0	.1				9.1	13.4
S	.1	1.8	3.8	4.8	2.5	.3	.1				13.4	12.4
SSW	.2	.9	2.7	.9	.3						4.9	9.1
SW	.1	.8	1.6	1.4							3.9	8.9
WSW	.1	1.0	1.1	1.1	.2						3.4	9.9
W	1.2	1.5	2.2	1.6	.4	.3					7.2	9.1
WNW	.4	1.0	1.8	2.7	.5	.6	.1				7.2	11.9
NW	.1	1.5	2.6	3.4	1.2	.2					9.0	11.6
NNW	.4	.8	2.0	2.8	1.5	.8					8.3	12.6
VARIABLE												
CALM	////////////////////										2.6	////
TOTALS	4.3	17.2	28.7	33.1	10.0	3.4	.6				100.0	10.8

TOTAL NUMBER OF OBSERVATIONS: 930

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 77-86  
MONTH: OCT HOURS(LST): 1800-2000

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: OCT HOURS(1ST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.3	1.5	4.0	2.9	.5	.1	.2					9.6	10.6
NNE	.2	.8	.1	.6	.3							2.0	9.8
NE	.1	1.0	.4	.8	.1							2.4	8.7
ENE	.4	1.0	.1	.1								1.6	4.6
E	.1	1.1	.5									1.7	5.6
ESE	.2	.8	.1									1.1	4.6
SE	.5	1.1	.8	.4								2.8	6.3
SSE	.4	2.5	3.5	2.6	.6							9.7	9.5
S	1.4	4.0	4.6	4.1	1.2							15.3	9.0
SSW	.8	2.4	1.4	.8	.2							5.5	7.1
SW	.9	2.8	1.7	.2	.2							5.8	6.1
WSW	.4	2.9	1.1	.3								4.7	6.0
W	1.7	4.0	2.0	1.7								9.5	6.7
WNW	.8	2.6	1.4	1.4	.5							6.7	8.3
NW	1.3	1.4	2.7	.6	.3							6.3	7.4
NNW	.6	1.6	2.2	1.8	.2	.8	.1					7.3	10.4
VARIABLE													
CALM	////////////////////											8.1	////
TOTALS	10.2	31.2	26.7	18.4	4.3	.9	.3					100.0	7.6

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: OCT HOURS (LST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.6	1.5	3.3	4.7	1.3	.2	.1				11.8	11.5
NNE	.1	.6	.8	.8	.1	.0					2.4	9.5
NE	.3	.6	.5	.4	.0						1.8	7.9
ENE	.4	.9	.3	.2	.0						1.8	5.8
E	.5	.8	.6	.2							2.1	6.0
ESE	.2	.7	.2	.1							1.3	5.9
SE	.3	1.0	.9	.5	.1						2.7	7.4
SSE	.6	1.8	2.5	2.7	1.0	.3	.0				8.9	10.6
S	.7	2.9	5.2	4.5	1.3	.2	.1				14.9	10.2
SSW	.5	1.7	1.6	.8	.2	.0					4.9	8.0
SW	.8	1.9	1.5	.8	.0	.1					5.0	7.1
WSW	.6	1.6	1.1	.7	.1	.0					4.2	7.5
W	1.2	2.9	2.6	1.8	.3	.1					8.9	8.0
WNW	.7	2.0	2.1	1.6	.5	.1	.0				7.1	9.1
NW	.8	1.6	2.9	1.9	.7	.2	.0				8.0	9.7
NNW	.5	1.7	2.4	2.6	1.0	.4	.0				8.6	11.0
VARIABLE												
CALM	////////////////////										5.6	////
TOTALS	8.9	24.1	28.5	24.3	6.8	1.6	.3				100.0	8.9

TOTAL NUMBER OF OBSERVATIONS: 7440



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(IST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.7	2.4	2.7	3.8	1.6	.8	.1					12.0	11.7
NNE	.2	.9	1.4	.2								2.8	7.0
NE	.4	.2	.3	.1								1.1	5.5
ENE	.4	.3	.4	.2								1.4	5.9
E		.4	.2									.7	5.7
ESE	.3	.2	.6	.1								1.2	6.9
SE	.8	1.2	.7	.1								2.8	5.2
SSE	.3	2.1	2.2	.9	.2							5.8	7.8
S	.6	4.3	6.3	2.3	1.2							14.8	8.8
SSW	.8	2.4	1.6	.9	.1							5.8	7.1
SW	1.0	2.2	1.1	.4								4.8	5.7
WSW	.6	2.0	1.1	.6		.1	.1					4.4	7.5
W	1.0	3.1	2.0	1.1	.2	.1						7.6	7.4
WNW	.9	2.3	2.0	2.4	.2	.4						8.3	9.5
NW	.8	1.9	2.4	2.3	.3	.1	.1	.1				8.1	9.8
NNW	.6	1.4	1.9	1.8	1.2	.6	.3					7.8	12.1
VARIABLE													
CALM	////////////////////											10.7	////
TOTALS	9.3	27.7	27.0	17.3	5.1	2.1	.7	.1				100.0	7.9

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(LST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.7	2.8	3.9	4.1	1.2	.6	.1				13.3	10.9
NNE	.2	.4	.6	.7	.1						2.0	8.9
NE	.3		.4	.3							1.1	7.5
ENE		.4	.7	.1							1.2	7.2
E	.2	.6		.2							1.0	5.3
ESE	.4	.2	.1								.8	4.0
SE	.4	.7	1.4	.4							3.0	7.3
SSE	1.0	1.7	2.1	1.3	.2	.2					6.6	8.5
S	.9	3.0	5.7	3.3	.6	.2					13.7	9.0
SSW	.6	2.1	2.0	.9	.2	.1					5.9	7.8
SW	1.2	2.3	.8	.1							4.4	4.9
WSW	.3	2.2	1.1	.2							3.9	5.9
W	1.8	2.9	2.6	.9	.1		.3				8.6	7.5
WNW	.3	2.6	2.8	2.3	.4						8.4	9.1
NW	.6	2.0	2.7	2.4	.3	.8					8.8	10.6
NNW	.2	1.6	1.8	1.7	1.3	.7					7.2	12.3
VARIABLE												
CALM	////////////////////										10.1	////
TOTALS	9.2	25.4	28.6	19.1	4.6	2.6	.4				100.0	8.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(1ST): 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL Σ	MEAN WIND	
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55			GE 56
N	.6	3.1	4.9	2.7	1.3	.6	.6					13.7	10.9
NNE	.1	.6	.7		.1	.1						1.6	8.7
NE	.1	.6	.3	.2								1.2	6.9
ENE	.6	.4	.1									1.1	4.0
E	.3	.4	.1	.1								1.0	5.7
ESE	.2	.4										.7	4.3
SE	.4	.7	1.6	.7								3.3	7.6
SSE	.8	2.7	3.1	1.1	.1							7.8	7.5
S	.6	4.0	5.7	3.2	.2	.3						14.0	9.0
SSW	.7	1.6	1.7	1.3	.1							5.3	8.1
SW	.4	1.0	.9	.7								3.0	7.0
WSW	.4	1.2	1.2	.2								3.1	6.5
W	.7	2.9	2.8	1.6	.2	.3						8.4	8.6
WNW	.8	2.4	3.3	2.2	.9							9.7	9.0
NW	.8	2.0	3.1	1.8	.7	.8						9.1	10.3
NNW	1.1	.6	1.3	3.0	.7	.4						7.1	11.2
VARIABLE													
CALP	////////////////////////////////////											9.9	////
TOTALS	8.6	24.6	30.8	18.8	4.3	2.6	.6					100.0	8.1

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(LST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.4	3.6	4.4	5.2	1.2	.6	.8					16.2	11.7
NNE	.7	.6	.8	.6								2.6	7.0
NE	.1	.3	.7	.2								1.3	8.2
ENE	.2	.4	.2									.9	4.8
E	.3	.4	.1									.9	4.8
ESE		.3	.4									.8	6.7
SE	.3	1.3	1.0	.9								3.6	7.6
SSE	.7	2.3	2.3	2.2	.6							8.1	9.0
S	.4	2.7	4.9	5.2	1.1	.3						14.7	10.8
SSW	.3	1.3	2.6	.8	.2							5.2	8.1
SW	.9	.9	1.3	.9								4.0	7.6
WSW	.2	1.3	.6	.7								2.8	7.7
W	.3	2.1	2.7	2.0	.9		.2					8.2	10.2
WNW	.3	1.3	1.8	3.4	.8	.1						7.8	11.1
NW	.4	1.0	3.7	4.1	1.8	.7						11.7	12.2
NNW	.4	1.8	2.1	2.3	.7	.3	.1					7.8	10.8
VARIABLE													
CALM	////////////////////											3.6	////
TOTALS	6.2	21.8	29.6	28.6	7.2	2.0	1.1					100.0	9.8

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(IST): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.4	1.6	5.9	4.1	2.3	.8	.3	.2				15.7	12.5
NNE	.2	.9	2.3	1.1								4.6	8.9
NE		.2	.2	.6	.1							1.1	11.0
ENE	.4	.1	.4									1.0	4.9
E	.3	.1	.7	.1								1.2	7.0
ESE	.6	.4	.4									1.4	4.8
SE	.3	.9	1.1	1.1	.1							3.6	8.8
SSE	.2	2.0	1.8	2.3	.3	.2						6.9	9.8
S	.1	.9	4.7	5.4	1.3	.7						13.1	12.1
SSW	.2	.9	2.3	2.0	.9							6.3	11.2
SW	.3	1.3	1.1	.7								3.4	7.4
WSW	.2	.6	1.7	.3								2.8	7.9
W	.2	1.8	2.7	2.7	.2	.2	.1					7.9	10.0
WNW	.2	1.6	2.3	3.9	.8							8.8	11.1
NW	.7	1.1	2.1	3.8	1.6	.3						9.6	11.9
NNW	.2	1.7	1.7	4.0	.9	.3	.2					9.0	12.2
VARIABLE													
CALM	////////////////////											3.7	////
TOTALS	4.8	16.0	31.4	32.1	8.6	2.6	.7	.2				100.0	10.5

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(LST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.2	2.3	4.7	4.1	1.6	.6	.1	.2				13.8	11.9
NNE	.3	1.7	2.3	.8								5.1	7.7
NE	.7	1.0	.7	.2								2.6	6.3
ENE	.7	1.0	.4	.4	.1	.2						2.9	8.0
E	.9	.7	.2									1.8	4.2
ESE	.3	.8	.2	.3								1.7	6.4
SE	.7	1.0	1.8	.9	.1							4.4	8.1
SSE	.9	1.6	2.7	2.1	.8	.2	.2					8.4	10.0
S	.2	2.8	4.4	2.8	1.1	.2						11.6	10.1
SSW	.3	1.2	1.7	1.1	.7	.1						5.1	9.8
SW	.6	.3	1.2		.2							2.3	7.5
WSW	.4	1.8	1.3	.4								4.0	6.7
W	1.2	2.0	1.4	2.1	.6	.1						7.4	8.8
WNW	.6	1.9	2.1	2.4	.8	.1						7.9	10.3
NW	.4	1.0	2.4	2.6	.7	.2						7.3	10.9
NNW	.4	1.3	2.0	3.2	1.0	.7	.3	.1				9.1	12.9
VARIABLE													
CALM	////////////////////											4.6	////
TOTALS	8.9	22.3	29.7	23.6	7.6	2.4	.7	.3				100.0	9.3

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(LST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.8	3.8	3.2	3.9	.7	.9	.3				13.6	10.6
NNE	.7	2.1	1.6	.7							5.0	6.4
NE		.9	.6	.2							1.7	7.4
ENE	.8	.6	.4	.1	.2						2.1	7.1
E	1.0	.6	.7	.1							2.3	5.1
ESE	.2	.6	.3	.2							1.3	6.6
SE	.3	1.4	.8	.2							2.8	6.2
SSE	1.1	2.4	3.1	1.3	.2	.1					8.3	8.1
S	1.0	3.2	5.3	1.9	.9	.7					13.0	9.2
SSW	.7	2.6	1.2	.7	.6						5.7	7.6
SW	.8	1.1	.9	.4							3.2	6.5
WSW	.8	1.1	.7	.2							2.8	5.7
W	1.1	3.8	1.3	1.9	.1						8.2	7.3
WNW	.2	2.1	1.7	1.6	.4	.1					6.1	9.6
NW	.8	1.7	1.8	1.8	.7			.1			6.8	9.9
NNW	.4	.9	2.6	2.1	.9	.4	.1	.2			7.7	12.7
VARIABLE												
CALM	////////////////////////////////////										9.4	////
TOTALS	10.7	28.8	26.1	17.3	4.7	2.2	.4	.3			100.0	7.9

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORMS AFB MD

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(IST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND	
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55			GE 56
N	.6	3.3	3.6	4.2	1.2	1.1	.3					14.3	11.5
NNE	.4	1.1	1.2	.4								3.2	6.8
NE	.2	.9	.2	.4								1.8	7.6
ENE	.7	.4	.4	.1								1.7	5.2
E	.1	.4	.8	.3								1.7	7.9
ESE	.2	.9	.3									1.4	5.2
SE	.2	1.1	.7									2.0	5.6
SSE	1.2	1.7	1.9	.7	.1							5.6	7.2
S	.8	3.6	6.1	3.3	1.1	.2						15.1	9.3
SSW	.9	2.1	1.8	.9	.3	.1						6.0	7.8
SW	1.2	1.4	.6	.4	.1							3.8	6.0
WSW	.8	2.1	1.1	.2		.1						4.3	6.1
W	1.8	2.8	2.0	1.0	.2	.1		.1				8.0	7.3
WNW	.3	2.2	1.8	2.1	.4							6.9	9.5
NW	.4	1.6	2.4	2.0	.8	.3		.3				7.9	11.4
NNW	.6	1.3	1.4	2.0	1.1	.2						6.7	10.8
VARIABLE													
CALM	////////////////////////////////////											9.7	////
TOTALS	10.4	27.0	26.3	18.1	5.4	2.2	.3	.4				100.0	8.0

TOTAL NUMBER OF OBSERVATIONS: 900



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(LST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.5	2.9	4.2	4.0	1.4	.7	.3	.1			14.1	11.5
NNE	.4	1.0	1.4	.6	.0	.0					3.3	7.6
NE	.2	.5	.4	.3	.0						1.5	7.4
ENE	.5	.5	.4	.1	.0	.0					1.5	6.3
E	.4	.5	.3	.1							1.3	5.7
ESE	.3	.5	.3	.1							1.2	5.8
SE	.4	1.0	1.1	.5	.0						3.2	7.2
SSE	.8	2.1	2.4	1.5	.3	.1	.0				7.2	8.5
S	.6	3.1	5.4	3.4	.9	.3					13.7	9.8
SSW	.6	1.8	1.8	1.1	.4	.0					5.7	8.5
SW	.8	1.3	1.0	.5	.0						3.6	6.5
WSW	.5	1.5	1.1	.4		.0	.0				3.5	6.7
W	1.0	2.7	2.2	1.7	.3	.1	.1	.0			8.0	8.4
WNW	.5	2.1	2.2	2.6	.6	.1					8.0	9.9
NW	.6	1.5	2.6	2.6	.8	.4	.0	.1			8.7	11.0
NNW	.5	1.3	1.8	2.5	1.0	.5	.1	.0			7.8	11.9
VARIABLE												
CALM	////////////////////										7.7	////
TOTALS	8.5	24.2	28.7	21.9	5.9	2.3	.6	.2			100.0	8.7

TOTAL NUMBER OF OBSERVATIONS: 7200

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(1ST): 0000-0200

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	1.0	1.6	3.3	5.2	1.0	.3						12.4	10.6
NNE	.3	.5	.8		.1							1.7	6.6
NE		.1	.2	.1								.4	7.8
ENE		.4	.6	.1								1.2	8.0
E	.3	.3	.1									.8	4.1
ESE	.1		.4									.5	7.8
SE	.2	1.0	1.2	.1								2.5	6.4
SSE	.2	2.3	1.5	.9								4.8	7.4
S	1.5	3.4	3.5	3.4	.9	.2						13.0	8.9
SSW	.9	2.0	1.4	.8	.4							5.5	8.1
SW	1.7	1.6	.8	.9	.1							5.1	6.2
WSW	1.1	1.8	1.4	.3	.2							4.8	6.7
W	1.8	3.1	2.2	2.0	.4	.1						9.7	7.7
WNW	1.1	3.0	4.2	2.2	.6	.2						11.3	8.9
NW	.8	1.5	3.4	4.0	1.0							10.6	10.2
NNW	.5	1.4	3.1	1.9	1.3	.2						8.5	10.8
VARIABLE													
CALM	////////////////////											7.2	////
TOTALS	11.5	24.2	28.2	21.8	6.0	1.1						100.0	8.1

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS (LST): 0300-0500

DIRECTION (DEGREES)	WIND SPEED IN KNOTS								TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40		
N	.6	1.7	3.5	4.9	2.2	1.2	.1		14.3	12.2
NNE	.1	.2	.4	.2					1.0	8.2
NE	.1	.2	.3						.6	6.7
ENE	.2	.4	.3	.2					1.2	6.7
E	.1	.1	.6	.1					1.0	8.7
ESE	.1	.5	.1	.4					1.2	8.0
SE	.4	.5	.8	.6					2.4	7.9
SSE	.1	1.7	1.8	.1	.1				3.9	7.4
S	1.6	4.4	3.0	3.9	1.3				14.2	8.9
SSW	.8	1.5	1.3	1.1	.1	.1			4.8	8.2
SW	.9	1.3	.5	.1					2.8	4.9
WSW	.6	2.2	1.4	.9		.1			5.2	7.1
W	1.2	2.8	2.2	1.3	.5	.2			8.2	8.2
WNW	1.0	2.6	3.3	1.8	.4	.1			9.2	8.5
NW	.5	3.8	5.6	2.6	.9	.1			13.4	8.9
NNW	.6	2.3	1.9	2.2	.9	.3			8.2	10.2
VARIABLE										
CALM	////////////////////								8.5	////
TOTALS	9.0	26.2	27.2	20.4	6.3	2.2	.1		100.0	8.2

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(1511): 0600-0800

DIRECTION (DEGREES)	WIND SPEED IN KNOTS									TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47		
N	1.1	1.9	3.8	4.1	2.3	1.5	.3	.1		15.1	12.7
NNE	.1	.6	.4	.2						1.4	7.3
NE		.4	.2	.1						.8	7.3
ENE		.5	.3	.5						1.4	8.5
E	.2	.3	.3							.9	5.4
ESE		.2	.3	.2	.3					1.1	11.3
SE	.2	1.0	.5	.6	.2					2.6	8.9
SSE	.6	1.5	1.5	.4						4.1	6.7
S	1.2	4.8	4.2	3.5	1.4	.1				15.3	9.1
SSW	.2	2.2	1.2	.6	.2					4.4	8.0
SW	.3	1.7	1.4	.1						3.5	6.0
WSW	.3	1.1	1.0	.8	.1					3.2	8.1
W	1.6	2.5	3.0	1.8	.6					9.6	8.1
WNW	.5	3.1	2.8	1.8	.5	.2				9.0	8.8
NW	.5	2.9	3.7	2.3	1.0	.3				10.6	9.2
NNW	.5	1.9	2.6	2.9	1.5	.1				9.6	10.8
VARIABLE											
CALM	////////////////////									7.5	////
TOTALS	7.5	26.8	27.2	20.1	8.2	2.3	.3	.1		100.0	8.7

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(IST): 0900-1100

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.5	1.4	3.4	5.1	2.6	1.1		.1			14.2	12.9
NNE	.1	.8	.5								1.4	6.0
NE	.2										.2	2.5
ENE	.1	.2	.2	.3							.9	7.8
E	.1	.2	1.4								1.7	8.3
ESE	.1	.4	.1	.2	.1						1.0	9.2
SE	.3	.8	.6	.4							2.2	7.0
SSE	.2	.6	2.2	1.1	.5	.1					4.7	10.4
S	1.0	3.7	4.3	4.0	1.9						14.8	9.9
SSW	.9	1.3	1.0	1.3	.1						4.2	7.6
SW	.4	1.7	.9	.3							3.3	6.4
WSW	.8	1.1	1.1	.8							3.7	7.4
W	1.5	2.0	2.0	2.4	1.0	.6					9.6	10.2
WNW	.6	2.5	3.0	3.0	1.5	.1					10.8	10.5
NW	.4	2.2	2.9	1.8	.8	.2					8.3	9.6
NNW	.9	1.9	3.5	2.9	1.6	.6	.1				11.6	11.3
VARIABLE												
CALM	////////////////////										7.5	////
TOTALS	8.2	20.8	27.2	23.2	10.1	2.8	.1	.1			100.0	9.3

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(157): 1200-1400

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.9	.9	3.8	5.7	2.6	1.4					15.2	13.1
NNE	.2	.5	.5	.2							1.5	7.1
NE	.3	.2	.3								.9	5.4
ENE	.2	.4	.3	.3							1.3	7.3
E	.2	.2	.8	.3							1.5	8.5
ESE	.1		.2		.1						.4	8.8
SE	.2	.8	.8	.8							2.5	8.5
SSE	.3	1.2	1.4	1.3	.1	.1					4.4	9.1
S	.8	2.7	3.2	3.4	1.9	.1					12.2	10.6
SSW	.4	.9	1.7	1.6	.8						5.4	10.3
SW	.4	1.3	2.3	.5	.2	.1					4.8	8.5
WSW	.3	.8	1.1	1.5							3.7	9.6
W	1.2	1.4	2.3	2.8	1.0	.3					8.9	10.2
WNW	.4	1.6	1.9	3.8	1.1	.4	.1				9.4	11.8
NW	.6	2.0	4.4	3.7	1.3	.5	.1				12.7	11.2
NNW	.4	2.2	2.4	3.7	1.3	.5					10.4	11.5
VARIABLE												
CALM	////////////////////										4.9	////
TOTALS	7.1	17.0	27.3	29.6	10.3	3.5	.2				100.0	10.2

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS (LST): 1500-1700

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	1.2	2.2	3.8	4.7	2.4	.4					14.6	11.3
NNE	.2	1.0	.8	.2							2.2	6.8
NE	.3		.5								.9	6.9
ENE	.2	.1	.8	.4							1.5	8.5
E	.3	.4	.8	.1							1.6	6.4
ESE	.2	.4	.6		.1						1.4	7.4
SE	.1	1.3	.5	.2							2.2	6.7
SSE	.2	1.1	1.4	1.7	.3						4.7	9.8
S	1.1	3.0	4.0	3.9	1.3						14.1	9.8
SSW	.3	1.6	1.4	1.2	.2						4.7	8.6
SW	.2	1.2	1.2	.5	.1						3.2	7.8
WSW	.8	1.5	1.2	.2	.1	.1					3.9	6.7
W	.9	2.7	3.2	1.5	.3	.2	.1				8.9	8.7
WNW	.5	2.6	2.5	2.2	1.1	.2					9.0	9.8
NW	.6	1.9	3.1	2.4	1.3	.5					9.9	10.8
NNW	.4	1.9	2.3	2.9	1.3	.4	.1				9.4	11.6
VARIABLE												
CALM	////////////////////										7.8	////
TOTALS	7.6	22.9	28.8	22.2	8.5	1.9	.2				100.0	8.9

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS (LST): 1800-2000

DIRECTION (DEGREES)	WIND SPEED IN KNOTS											TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56		
N	.2	1.5	2.9	5.1	1.4	.2						11.3	11.9
NNE	.4	.3	.8	.2								1.7	7.3
NE	.1	.2	.3									.6	5.8
ENE	.1	.3	.6									1.1	7.5
E	.6	.6	.3	.1								1.7	5.1
ESE	.1	.3	.3		.1	.1						1.0	9.1
SE	.9	1.1	.5		.1							2.6	5.7
SSE	1.5	1.5	1.4	1.0	.2							5.6	7.2
S	1.6	3.8	3.8	4.3	1.1	.1						14.6	9.1
SSW	.6	2.0	2.9	1.1	.2							6.9	7.9
SW	.9	1.4	.5	1.2	.1							4.1	7.5
WSW	.5	1.8	.5	1.2								4.1	7.2
W	1.5	3.5	2.4	1.5	.4	.4						9.8	8.1
WNW	1.1	2.5	2.3	2.2	1.3	.2	.2					9.7	10.1
NW	.8	2.6	2.8	2.2	.8	.4						9.5	9.7
NNW	.3	1.2	2.4	2.5	1.7	.3						8.4	11.9
VARIABLE													
CALM	////////////////////////////////////											7.4	////
TOTALS	11.3	24.7	24.7	22.4	7.4	1.8	.2					100.0	8.5

TOTAL NUMBER OF OBSERVATIONS: 930



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(IST): 2100-2300

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.8	1.4	3.1	5.7	1.3	.9	.1				13.2	12.3
NNE	.1	.3	.9								1.3	6.6
NE	.2	.3	.1								.6	4.3
ENE	.2	.2	.5								1.0	6.7
E	.4	.5	.6								1.6	5.5
ESE	.2	.5	.1								.9	5.5
SE	.3	.6	.8	.1							1.8	6.5
SSE	1.1	1.1	1.3	1.0							4.4	7.3
S	1.5	2.6	4.7	4.0	1.0						13.8	9.3
SSW	.5	1.8	1.6	1.1	.4						5.5	8.6
SW	.6	1.7	1.1	1.6		.1					5.2	8.3
WSW	1.0	2.4	.9	.4	.2						4.8	6.4
W	1.5	2.8	2.5	2.2	.5	.1					9.6	8.2
WNW	.5	2.3	3.1	1.7	.3	.3	.1				8.4	9.3
NW	1.1	2.9	4.1	4.3	.8	.1	.1				13.3	9.5
NNW	.2	1.1	2.0	1.9	1.2	.1					6.6	11.6
VARIABLE												
CALM	////////////////////										8.1	////
TOTALS	10.3	22.6	27.4	24.0	5.7	1.6	.3				100.0	8.5

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(LST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.8	1.6	3.5	5.1	1.9	.9	.1	.0			13.8	12.2
NNE	.2	.5	.6	.1	.0						1.5	6.9
NE	.2	.2	.3	.0							.6	6.1
ENE	.1	.3	.5	.2							1.2	7.7
E	.3	.3	.6	.1							1.3	6.6
ESE	.1	.3	.3	.1	.1	.0					.9	8.4
SE	.3	.9	.7	.4	.0						2.3	7.2
SSE	.5	1.4	1.6	.9	.2	.0					4.6	8.2
S	1.3	3.5	4.0	3.8	1.3	.1					14.0	9.4
SSW	.6	1.7	1.6	1.0	.3	.0					5.2	8.4
SW	.7	1.5	1.1	.7	.1	.0					4.0	7.1
WSW	.7	1.6	1.1	.8	.1	.0					4.2	7.3
W	1.4	2.6	2.5	1.9	.6	.3	.0				9.3	8.7
WNW	.7	2.5	2.9	2.3	.9	.2	.1				9.6	9.7
NW	.7	2.5	3.7	2.9	1.0	.3	.0				11.0	9.9
NNW	.5	1.7	2.5	2.6	1.3	.3	.0				9.1	11.2
VARIABLE												
CALM	////////////////////										7.4	////
TOTALS	9.1	23.1	27.3	23.0	7.8	2.2	.2	.0			100.0	8.8

TOTAL NUMBER OF OBSERVATIONS: 7440

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-87  
MONTH: ALL HOURS(1ST): ALL

DIRECTION (DEGREES)	WIND SPEED IN KNOTS										TOTAL %	MEAN WIND
	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	
N	.9	2.6	4.2	5.0	1.6	.6	.1	.0			15.2	11.2
NNE	.4	1.0	1.3	.8	.1	.0					3.6	8.1
NE	.4	.7	.7	.3	.0	.0		.0			2.1	6.9
ENE	.5	.8	.6	.2	.0	.0	.0				2.1	6.3
E	.6	1.0	.8	.3	.0						2.7	6.4
ESE	.4	.8	.7	.3	.0	.0					2.2	6.6
SE	.5	1.3	1.2	.7	.1	.0					3.8	7.5
SSE	.7	1.8	2.3	1.7	.5	.1	.0				7.1	9.2
S	.9	2.8	3.8	3.4	1.0	.3	.0				12.1	9.8
SSW	.6	1.4	1.3	.8	.2	.0	.0				4.4	8.2
SW	.7	1.4	1.0	.5	.1	.0	.0				3.6	6.8
WSW	.6	1.4	.9	.5	.1	.0	.0				3.4	6.8
W	1.1	2.4	2.0	1.4	.4	.1	.0	.0			7.5	8.1
WNW	.7	1.7	1.9	1.6	.5	.1	.0	.0			6.6	9.4
NW	.7	1.7	2.2	1.8	.5	.2	.0	.0			7.2	9.5
NNW	.8	1.9	2.3	2.2	.7	.2	.0	.0			8.1	9.9
VARIABLE												
CALM	////////////////////										8.2	////
TOTALS	10.5	24.9	27.1	21.4	5.8	1.7	.3	.0			100.0	8.3

TOTAL NUMBER OF OBSERVATIONS: 87641

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-87  
MONTH: ALL HOURS (LST): ALL

CEILINGS 200 TO 1400 FEET WITH VISIBILITIES 1/2 MILE OR MORE  
AND/OR

CEILINGS 200 FEET OR MORE WITH VISIBILITIES 1/2 TO 2-1/2 MILES

DIRECTION (DEGREES)	1-3	4-6	7-10	11-16	17-21	22-27	28-33	34-40	41-47	48-55	GE 56	TOTAL %	MEAN WIND
N	.8	2.6	6.6	11.9	5.5	3.0	.5	.0				30.8	13.8
NNE	.3	1.3	2.4	1.7	.3	.0						6.1	9.3
NE	.3	1.0	1.2	.8	.1							3.4	8.4
ENE	.4	1.0	1.3	.8	.1	.0						3.7	8.3
E	.4	1.3	1.4	.6	.1							3.8	7.9
ESE	.4	1.0	.9	.5	.1	.0						2.8	7.7
SE	.4	1.1	1.5	1.0	.1	.0						4.1	8.3
SSE	.5	1.3	2.2	1.9	.5	.2						6.6	10.0
S	.5	1.7	3.3	3.8	1.0	.5	.0					10.9	11.1
SSW	.2	.6	.8	.5	.2	.0						2.3	8.9
SW	.2	.4	.3	.1	.0	.1						1.1	7.3
WSW	.2	.3	.1	.0	.0	.0						.7	6.4
W	.3	.3	.4	.1	.0	.0	.0					1.2	7.4
WNW	.3	.5	.6	.4	.3	.3	.1					2.4	12.1
NW	.4	.7	1.3	1.4	.6	.5	.1	.0				4.9	12.1
NNW	.4	1.5	2.2	3.0	2.0	.9	.1	.0				10.2	13.1
VARIABLE													
CALM	////////////////////												4.9
TOTALS	5.8	16.7	26.6	28.5	11.0	5.5	.9	.0				100.0	10.8

TOTAL NUMBER OF OBSERVATIONS: 9063

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## CEILING VERSUS VISIBILITY AND SKY COVER SUMMARIES

### CEILING VERSUS VISIBILITY SUMMARY

THIS SUMMARY IS A BIVARIATE FREQUENCY DISTRIBUTION BY CLASSES OF CEILING FROM "0" THROUGH EQUAL TO OR GREATER THAN 20,000 FEET AND AS A SEPARATE CLASS "NO CEILING", VERSUS VISIBILITY IN 16 CLASSES FROM ZERO THROUGH EQUAL TO OR GREATER THAN 10 MILES.

DATA DERIVED FROM HOURLY OBSERVATIONS.

FREQUENCY DISTRIBUTION PRESENTED BY THE STANDARD 3-HOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED).

#### NOTES:

BEGINNING IN 1968, METAR STATIONS REPORTED VISIBILITIES TO 6 MILES AND GREATER THAN 6 MILES. THEREFORE THE COLUMN FOR VISIBILITIES EQUAL TO OR GREATER THAN 10 MILES APPEAR BLANK.

AS A RULE, AIRWAYS STATIONS NORMALLY REPORT VISIBILITIES TO 6 MILES AND 7 OR GREATER, HOWEVER SOME STATIONS REPORT HIGHER VALUES. THEREFORE, THE 10 MILE VISIBILITY COLUMN SOMETIMES CONTAIN SMALL PERCENTAGE VALUES. HOWEVER, THESE VALUES ARE OF LITTLE MEANING AND SHOULD BE DISREGARDED.

FOR METAR CIVILIAN STATIONS REPORTING "CAVOK", ALL CEILINGS ABOVE 5000 FEET WERE SUPPRESSED TO 5000 FEET. THEREFORE, NO PERCENT VALUES APPEAR ABOVE 5000 FEET.

### SKY COVER SUMMARY

PRESENTS PERCENTAGES OF SKY COVER IN EITHER 10THS OF COVERAGE OR "AIRWAYS CLASSIFICATIONS".

DATA SUMMARIZED BY THE STANDARD 3-HOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED).

ALSO PRESENTED ARE MEAN SKY COVERS.

FOR AIRWAY STATIONS, THE CONVERSION FROM THE AIRWAYS DESIGNATIONS TO 10THS FOR PRESENTATION ARE:

CLEAR	-	6/10
SCATTERED	-	3/10
BROKEN	-	9/10
OVERCAST	-	10/10
OBSCURED	-	10/10

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS(LST): 0000-0200

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	51.4	54.1	54.4	54.5	54.9	55.1	55.4	55.5	55.6	56.3	56.5	56.5	56.8	56.8	56.8	56.8
GE 20000	53.8	57.1	57.4	57.5	58.0	58.1	58.4	58.5	58.6	59.4	59.5	59.5	59.8	59.8	59.8	59.8
GE 18000	53.9	57.2	57.5	57.6	58.1	58.2	58.5	58.6	58.7	59.5	59.6	59.6	59.9	59.9	59.9	59.9
GE 16000	53.9	57.2	57.5	57.6	58.1	58.2	58.5	58.6	58.7	59.5	59.6	59.6	59.9	59.9	59.9	59.9
GE 14000	53.9	57.2	57.5	57.6	58.1	58.2	58.5	58.6	58.7	59.5	59.6	59.6	59.9	59.9	59.9	59.9
GE 12000	54.1	57.4	57.7	57.8	58.3	58.4	58.7	58.8	58.9	59.7	59.8	59.8	60.1	60.1	60.1	60.1
GE 10000	55.7	59.1	59.6	59.8	60.3	60.4	60.8	60.9	61.0	61.7	61.8	61.8	62.2	62.2	62.2	62.2
GE 9000	55.9	59.4	59.8	60.0	60.5	60.6	61.0	61.1	61.2	61.9	62.0	62.0	62.4	62.4	62.4	62.4
GE 8000	58.0	61.5	62.2	62.4	63.0	63.1	63.4	63.5	63.7	64.4	64.5	64.5	64.8	64.8	64.8	64.8
GE 7000	58.7	62.5	63.1	63.7	64.3	64.4	64.7	64.8	64.9	65.7	65.8	65.8	66.1	66.1	66.1	66.1
GE 6000	60.3	64.1	64.7	65.4	66.1	66.2	66.6	66.7	66.8	67.6	67.7	67.7	68.1	68.1	68.1	68.1
GE 5000	62.3	66.8	68.1	68.7	69.7	69.8	70.1	70.2	70.3	71.2	71.3	71.3	71.6	71.6	71.6	71.6
GE 4500	62.6	67.5	68.8	69.5	70.4	70.5	70.9	71.0	71.1	71.9	72.0	72.0	72.4	72.4	72.4	72.4
GE 4000	64.5	70.8	72.5	73.3	74.8	74.9	75.3	75.4	75.5	76.3	76.5	76.5	76.8	76.8	76.8	76.8
GE 3500	64.8	71.1	72.9	73.8	75.3	75.4	75.7	75.8	75.9	76.8	76.9	76.9	77.2	77.2	77.2	77.2
GE 3000	66.2	73.2	75.3	76.1	78.3	78.4	78.7	78.9	79.1	80.2	80.3	80.3	80.6	80.6	80.6	80.6
GE 2500	67.5	74.7	76.9	77.7	80.1	80.6	81.1	81.3	81.5	82.6	82.7	82.7	83.0	83.0	83.0	83.0
GE 2000	69.5	77.1	79.4	80.2	82.9	83.5	84.2	84.5	84.7	85.8	85.9	85.9	86.2	86.2	86.2	86.2
GE 1800	69.9	77.5	79.8	80.6	83.3	84.1	84.7	85.1	85.3	86.3	86.5	86.5	86.8	86.8	86.8	86.8
GE 1500	71.4	79.2	81.5	82.4	85.3	86.0	87.1	87.4	87.6	88.7	88.9	88.9	89.4	89.5	89.5	89.5
GE 1200	73.4	81.5	84.1	85.1	88.1	88.8	89.9	90.2	90.4	91.5	91.9	91.9	92.4	92.5	92.5	92.5
GE 1000	73.7	82.0	84.9	86.0	89.0	89.8	90.9	91.2	91.5	92.6	93.0	93.0	93.4	93.5	93.5	93.5
GE 900	74.2	83.0	86.0	87.1	90.1	90.9	91.9	92.3	92.6	93.7	94.1	94.1	94.5	94.6	94.6	94.6
GE 800	74.2	83.2	86.2	87.7	90.4	91.2	92.3	92.6	92.9	94.0	94.4	94.4	94.8	94.9	94.9	94.9
GE 700	74.4	83.5	86.7	87.7	91.0	91.7	92.8	93.1	93.4	94.8	95.3	95.3	95.7	95.8	95.8	95.8
GE 600	75.1	84.2	87.3	88.4	91.6	92.4	93.4	93.9	94.2	95.7	96.1	96.1	96.6	96.7	96.7	96.7
GE 500	75.3	84.4	87.5	88.6	91.8	92.6	93.7	94.1	94.4	96.2	96.7	96.7	97.1	97.2	97.2	97.2
GE 400	75.3	84.7	87.8	88.9	92.2	92.9	94.1	94.6	94.9	96.8	97.2	97.2	97.6	97.7	97.7	97.7
GE 300	75.3	84.7	87.8	88.9	92.2	92.9	94.4	94.9	95.3	97.3	97.7	97.7	98.5	98.6	98.6	98.6
GE 200	75.3	84.7	87.8	88.9	92.2	92.9	94.4	95.1	95.4	97.6	98.1	98.1	99.0	99.1	99.1	99.1
GE 100	75.3	84.7	87.8	88.9	92.2	92.9	94.4	95.1	95.4	97.6	98.1	98.1	99.1	99.2	99.2	99.2
GE 0	75.3	84.7	87.8	88.9	92.2	92.9	94.4	95.1	95.4	97.6	98.1	98.1	99.1	99.2	99.2	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS(LST): 0300-0500

CEILING IN FEET	VISIBILITY IN STATUTE MILES																
	GE 1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	48.3	51.0	51.5	51.7	52.4	52.4	52.8	53.2	53.2	53.7	53.7	53.7	54.1	54.1	54.1	54.1	
GE 20000	51.3	54.7	55.3	55.5	56.1	56.1	56.6	57.0	57.0	57.4	57.4	57.4	57.8	57.8	57.8	57.8	57.8
GE 18000	51.3	54.7	55.3	55.6	56.2	56.2	56.7	57.1	57.1	57.5	57.5	57.5	58.0	58.0	58.0	58.0	58.0
GE 16000	51.3	54.7	55.3	55.6	56.2	56.2	56.7	57.1	57.1	57.5	57.5	57.5	58.0	58.0	58.0	58.0	58.0
GE 14000	51.6	55.1	55.6	55.9	56.6	56.6	57.0	57.4	57.4	57.8	57.8	57.8	58.3	58.3	58.3	58.3	58.3
GE 12000	51.6	55.1	55.6	55.9	56.6	56.6	57.0	57.4	57.4	57.8	57.8	57.8	58.3	58.3	58.3	58.3	58.3
GE 10000	54.1	58.0	58.5	58.8	59.5	59.5	59.9	60.3	60.3	60.8	60.8	60.8	61.2	61.2	61.2	61.2	61.2
GE 9000	54.4	58.4	58.9	59.4	60.0	60.0	60.4	60.9	60.9	61.3	61.3	61.3	61.7	61.7	61.7	61.7	61.7
GE 8000	56.6	60.6	61.4	61.8	62.5	62.5	62.9	63.3	63.3	63.8	63.8	63.8	64.2	64.2	64.2	64.2	64.2
GE 7000	57.5	61.7	62.5	62.9	63.7	63.7	64.2	64.7	64.7	65.2	65.2	65.2	65.6	65.6	65.6	65.6	65.6
GE 6000	58.7	63.3	64.3	64.7	65.8	65.8	66.3	67.0	67.0	67.4	67.4	67.4	67.8	67.8	67.8	67.8	67.8
GE 5000	60.5	65.5	66.6	67.0	68.4	68.5	69.0	69.7	69.7	70.1	70.1	70.1	70.5	70.5	70.5	70.5	70.5
GE 4500	61.1	66.5	67.5	68.0	69.4	69.5	70.0	70.6	70.6	71.1	71.1	71.1	71.5	71.5	71.5	71.5	71.5
GE 4000	63.0	69.1	70.8	71.4	72.9	73.0	73.8	74.4	74.4	74.8	74.8	74.8	75.3	75.3	75.3	75.3	75.3
GE 3500	63.8	70.3	71.9	72.6	74.4	74.5	75.3	75.9	75.9	76.3	76.3	76.3	76.9	76.9	76.9	76.9	76.9
GE 3000	65.5	73.1	75.1	75.9	78.2	78.3	79.0	79.7	79.7	80.3	80.4	80.4	80.9	80.9	80.9	80.9	80.9
GE 2500	66.9	74.9	77.0	78.1	80.4	80.6	81.4	82.0	82.0	82.7	82.8	82.8	83.2	83.2	83.2	83.2	83.2
GE 2000	69.4	78.3	80.5	81.7	84.2	84.4	85.5	86.1	86.1	86.9	87.0	87.0	87.4	87.4	87.4	87.4	87.4
GE 1800	69.5	78.4	80.6	81.8	84.3	84.5	85.7	86.3	86.3	87.1	87.2	87.2	87.6	87.6	87.6	87.6	87.6
GE 1500	70.4	79.7	82.3	83.5	86.1	86.3	87.8	88.5	88.5	89.2	89.5	89.5	89.9	89.9	89.9	89.9	89.9
GE 1200	72.5	81.9	84.5	85.9	88.5	88.7	90.2	91.0	91.1	91.9	92.2	92.2	92.9	92.9	92.9	92.9	92.9
GE 1000	73.0	82.8	85.5	86.9	89.5	89.7	91.2	91.9	92.2	93.0	93.2	93.2	94.0	94.2	94.2	94.2	94.2
GE 900	73.3	83.1	85.8	87.2	89.8	90.0	91.5	92.3	92.5	93.3	93.5	93.5	94.3	94.5	94.6	94.6	94.6
GE 800	73.4	83.2	85.9	87.3	89.9	90.1	91.6	92.4	92.6	93.4	93.7	93.7	94.4	94.6	94.7	94.7	94.7
GE 700	73.4	83.3	86.0	87.4	90.1	90.3	91.8	92.6	92.8	94.0	94.2	94.2	94.9	95.2	95.3	95.3	95.3
GE 600	73.8	83.7	86.3	88.0	91.0	91.2	92.7	93.4	93.7	94.8	95.1	95.1	95.8	96.0	96.1	96.1	96.1
GE 500	73.9	83.8	86.5	88.3	91.3	91.6	93.1	93.9	94.1	95.4	95.6	95.6	96.3	96.6	96.7	96.8	96.8
GE 400	74.0	84.0	86.8	88.6	91.7	92.0	93.7	94.6	94.8	96.1	96.6	96.6	97.3	97.5	97.6	97.7	97.7
GE 300	74.0	84.1	87.0	88.8	91.9	92.3	93.9	94.8	95.1	96.3	96.8	96.8	97.8	98.1	98.2	98.3	98.3
GE 200	74.0	84.1	87.0	88.8	91.9	92.3	93.9	94.8	95.1	96.7	97.3	97.3	98.7	98.9	99.0	99.1	99.1
GE 100	74.0	84.1	87.0	88.8	91.9	92.3	93.9	94.8	95.1	96.7	97.4	97.4	98.8	99.0	99.6	99.7	99.7
GE 01	74.0	84.1	87.0	88.8	91.9	92.3	93.9	94.8	95.1	96.7	97.4	97.4	98.8	99.0	99.6	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 930



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS(LST): 0600-0800

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	48.5	51.2	51.7	51.9	52.6	52.6	52.8	52.9	52.9	53.0	53.4	53.4	53.5	53.5	53.5	53.5
GE 20000	50.0	53.1	53.7	54.0	54.6	54.6	54.8	54.9	54.9	55.1	55.5	55.5	55.6	55.6	55.6	55.6
GE 18000	50.0	53.1	53.7	54.0	54.6	54.6	54.8	54.9	54.9	55.1	55.5	55.5	55.6	55.6	55.6	55.6
GE 16000	50.0	53.1	53.7	54.0	54.6	54.6	54.8	54.9	54.9	55.1	55.5	55.5	55.6	55.6	55.6	55.6
GE 14000	50.9	54.0	54.5	54.8	55.5	55.5	55.7	55.8	55.8	55.9	56.3	56.3	56.5	56.5	56.5	56.5
GE 12000	51.4	54.5	55.1	55.4	56.0	56.0	56.2	56.3	56.3	56.5	56.9	56.9	57.0	57.0	57.0	57.0
GE 10000	54.2	57.6	58.2	58.5	59.1	59.1	59.4	59.5	59.5	59.6	60.0	60.0	60.1	60.1	60.1	60.1
GE 9000	54.9	58.4	58.9	59.2	59.9	59.9	60.1	60.2	60.2	60.3	60.8	60.8	60.9	60.9	60.9	60.9
GE 8000	56.7	60.1	60.8	61.1	61.8	61.8	62.2	62.3	62.3	62.4	62.8	62.8	62.9	62.9	62.9	62.9
GE 7000	57.4	61.1	61.7	62.2	62.9	63.0	63.4	63.7	63.7	63.8	64.2	64.2	64.3	64.3	64.3	64.3
GE 6000	58.6	62.5	63.1	63.5	64.5	64.6	65.1	65.3	65.3	65.5	65.9	65.9	66.0	66.0	66.0	66.0
GE 5000	60.9	65.2	65.9	66.7	67.8	68.0	68.5	68.7	68.7	68.9	69.4	69.4	69.5	69.5	69.5	69.5
GE 4500	61.3	65.7	66.5	67.2	68.4	68.5	69.0	69.2	69.2	69.5	69.9	69.9	70.0	70.0	70.0	70.0
GE 4000	63.5	69.0	70.0	71.0	72.2	72.3	73.1	73.3	73.3	73.5	74.0	74.0	74.1	74.1	74.1	74.1
GE 3500	64.0	69.5	70.4	71.4	72.8	72.9	73.8	74.0	74.0	74.2	74.6	74.6	74.7	74.7	74.7	74.7
GE 3000	66.3	72.4	73.3	75.1	76.6	76.7	77.6	77.8	77.8	78.1	78.5	78.5	78.6	78.6	78.6	78.6
GE 2500	68.1	74.3	75.5	77.3	78.9	79.2	80.2	80.5	80.5	80.8	81.2	81.2	81.3	81.3	81.3	81.3
GE 2000	70.6	77.7	78.9	81.0	82.8	83.1	84.2	84.5	84.5	84.7	85.2	85.2	85.3	85.3	85.3	85.3
GE 1800	71.4	78.6	79.8	81.8	83.7	84.0	85.1	85.4	85.4	85.6	86.0	86.0	86.1	86.1	86.1	86.1
GE 1500	73.1	80.9	82.2	84.3	86.3	86.8	87.8	88.3	88.3	88.5	88.9	88.9	89.1	89.2	89.2	89.2
GE 1200	73.7	81.4	82.7	84.9	87.0	87.4	88.5	89.0	89.1	89.6	90.0	90.0	90.4	90.5	90.5	90.5
GE 1000	74.3	82.5	83.8	86.1	88.3	88.7	89.9	90.4	90.5	91.0	91.4	91.4	91.8	92.3	92.4	92.4
GE 900	74.4	82.6	83.9	86.2	88.4	88.8	90.0	90.6	90.8	91.4	91.8	91.8	92.3	92.7	92.8	92.8
GE 800	74.4	82.7	84.0	86.3	88.6	89.0	90.2	90.9	91.0	91.8	92.3	92.3	92.7	93.1	93.2	93.2
GE 700	74.6	83.1	84.7	87.1	89.7	90.1	91.3	92.3	92.4	93.2	93.7	93.7	94.1	94.5	94.6	94.6
GE 600	74.7	83.4	85.1	87.5	90.4	90.9	92.3	93.4	93.5	94.6	95.1	95.1	95.5	95.9	96.0	96.0
GE 500	74.7	83.5	85.3	88.0	91.1	91.5	92.9	94.1	94.2	95.4	95.9	95.9	96.3	96.8	96.9	96.9
GE 400	74.7	84.2	85.9	88.6	91.7	92.2	93.5	94.7	94.8	96.1	96.7	96.7	97.1	97.5	97.6	97.6
GE 300	74.7	84.3	86.0	88.7	91.8	92.3	93.8	95.2	95.3	96.6	97.1	97.1	97.6	98.1	98.2	98.2
GE 200	74.7	84.3	86.0	88.7	91.8	92.3	93.9	95.3	95.4	96.9	97.6	97.7	98.6	99.0	99.1	99.1
GE 100	74.7	84.3	86.0	88.7	91.8	92.3	93.9	95.3	95.4	95.9	97.6	97.7	98.6	99.0	99.6	99.7
GE 0	74.7	84.3	86.0	88.7	91.8	92.3	93.9	95.3	95.4	96.9	97.6	97.7	98.6	99.0	99.6	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
LSAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS(IST): 0900-1100

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2	GE 1 1/2	GE 1	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	43.1	45.5	46.0	46.5	47.0	47.2	47.8	48.0	48.0	48.4	48.4	48.4	48.5	48.6	48.7	48.7
GE 20000	46.1	48.9	49.5	50.2	50.8	51.1	51.8	51.9	51.9	52.4	52.4	52.4	52.5	52.6	52.7	52.7
GE 18000	46.1	48.9	49.5	50.2	50.8	51.1	51.8	51.9	51.9	52.4	52.4	52.4	52.5	52.6	52.7	52.7
GE 16000	46.1	48.9	49.5	50.2	50.8	51.1	51.8	51.9	51.9	52.4	52.4	52.4	52.5	52.6	52.7	52.7
GE 14000	46.9	49.8	50.3	51.1	51.7	52.0	52.8	52.9	52.9	53.3	53.3	53.3	53.4	53.5	53.7	53.7
GE 12000	47.2	50.2	50.8	51.5	52.2	52.5	53.2	53.3	53.3	53.8	53.8	53.8	53.9	54.0	54.1	54.1
GE 10000	51.9	56.0	56.6	57.3	58.0	58.4	59.2	59.4	59.4	59.8	59.8	59.8	59.9	60.0	60.1	60.1
GE 9000	52.5	56.6	57.1	57.8	58.5	58.9	59.8	59.9	59.9	60.3	60.3	60.3	60.4	60.5	60.6	60.6
GE 8000	54.4	59.0	60.0	60.9	61.5	61.9	62.8	62.9	62.9	63.3	63.3	63.3	63.4	63.5	63.7	63.7
GE 7000	56.5	61.1	62.0	62.9	63.7	64.1	64.9	65.1	65.1	65.5	65.5	65.5	65.6	65.7	65.8	65.8
GE 6000	58.2	63.0	64.0	64.8	65.6	66.0	67.2	67.3	67.3	67.7	67.7	67.7	67.8	68.0	68.1	68.1
GE 5000	59.7	64.9	66.0	67.0	67.8	68.3	69.6	69.7	69.7	70.2	70.2	70.2	70.3	70.4	70.5	70.5
GE 4500	60.1	65.5	66.7	67.7	68.6	69.0	70.3	70.4	70.4	71.0	71.0	71.0	71.1	71.2	71.3	71.3
GE 4000	61.8	68.5	70.2	71.4	72.4	72.9	74.6	74.7	74.7	75.5	75.5	75.5	75.6	75.7	75.8	75.8
GE 3500	62.6	69.2	71.0	72.3	73.3	74.0	75.8	76.1	76.1	76.9	77.1	77.1	77.2	77.3	77.4	77.4
GE 3000	63.3	70.3	72.0	73.4	75.2	75.9	77.8	78.3	78.3	79.0	79.2	79.2	79.4	79.5	79.6	79.6
GE 2500	63.5	70.5	72.3	74.1	75.8	76.7	78.8	79.2	79.2	80.0	80.2	80.2	80.3	80.4	80.5	80.5
GE 2000	65.2	72.9	75.1	76.9	79.1	80.1	82.9	83.4	83.4	84.5	84.9	84.9	85.1	85.2	85.4	85.4
GE 1800	65.5	73.2	75.4	77.3	79.6	80.5	83.3	83.9	83.9	84.9	85.4	85.4	85.5	85.6	85.8	85.8
GE 1500	66.7	74.9	77.2	79.5	81.8	83.3	86.3	87.0	87.0	88.1	88.5	88.5	88.6	88.7	88.9	88.9
GE 1200	67.7	76.3	78.7	81.2	83.8	85.3	88.3	88.9	88.9	90.0	90.4	90.4	90.5	90.6	90.9	90.9
GE 1000	67.8	77.3	79.7	82.2	84.8	86.6	90.0	91.0	91.0	92.2	92.8	92.8	92.9	93.0	93.2	93.2
GE 900	68.0	77.6	80.0	82.5	85.2	86.9	90.4	91.6	91.6	92.8	93.4	93.4	93.5	93.7	93.9	93.9
GE 800	68.3	78.0	80.3	82.8	85.7	87.4	91.0	92.3	92.5	93.9	94.5	94.6	94.7	94.8	95.1	95.1
GE 700	68.3	78.2	80.6	83.1	86.3	88.2	91.7	93.0	93.2	94.6	95.3	95.4	95.5	95.6	95.8	95.8
GE 600	68.4	78.3	80.8	83.2	86.5	88.3	91.8	93.1	93.3	95.1	95.7	95.8	95.9	96.0	96.2	96.2
GE 500	68.4	78.5	81.0	83.4	87.2	89.1	92.9	94.2	94.4	96.1	96.8	96.9	97.5	97.6	97.8	98.0
GE 400	68.4	78.8	81.3	83.8	87.5	89.6	93.3	94.7	94.9	96.7	97.3	97.4	98.1	98.2	98.4	98.5
GE 300	68.4	78.8	81.3	83.8	87.5	89.6	93.4	94.8	95.1	96.8	97.4	97.5	98.2	98.3	98.5	98.6
GE 200	68.4	78.8	81.3	83.8	87.5	89.6	93.5	94.9	95.2	96.9	97.5	97.6	98.5	98.6	98.8	98.9
GE 100	68.4	78.8	81.3	83.8	87.5	89.6	93.5	94.9	95.2	96.9	97.5	97.6	98.5	98.6	99.4	99.8
GE 0	68.4	78.8	81.3	83.8	87.5	89.6	93.5	94.9	95.2	96.9	97.5	97.6	98.5	98.6	99.4	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS/SLST: 1200-1400

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	1	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE
	1	10	6	5	4	3	2 1/2	2	1 1/2	1 1/4	1	3/4	5/8	1/2	5/16	1/4
	0															
NO CEIL	42.3	46.0	46.6	47.4	48.8	48.9	49.1	49.4	49.6	49.6	49.8	49.8	49.9	49.9	49.9	49.9
GE 20000	47.4	52.2	52.8	53.9	55.3	55.4	55.6	55.8	56.0	56.0	56.3	56.3	56.5	56.5	56.5	56.5
GE 18000	47.4	52.2	52.8	54.1	55.5	55.6	55.8	56.0	56.2	56.2	56.6	56.6	56.7	56.7	56.7	56.7
GE 16000	47.4	52.2	52.8	54.1	55.5	55.6	55.8	56.0	56.2	56.2	56.6	56.6	56.7	56.7	56.7	56.7
GE 14000	47.8	52.6	53.2	54.5	55.9	56.0	56.2	56.5	56.7	56.7	57.0	57.0	57.1	57.1	57.1	57.1
GE 12000	48.0	52.9	53.5	54.8	56.2	56.3	56.6	56.8	57.0	57.0	57.3	57.3	57.4	57.4	57.4	57.4
GE 10000	51.3	57.8	58.6	59.9	61.3	61.5	61.7	61.9	62.2	62.2	62.5	62.5	62.6	62.6	62.6	62.6
GE 9000	52.2	58.9	59.8	61.1	62.5	62.7	62.9	63.1	63.3	63.3	63.7	63.7	63.8	63.8	63.8	63.8
GE 8000	54.2	61.2	62.2	63.8	65.2	65.4	65.6	65.8	66.0	66.0	66.3	66.3	66.5	66.5	66.5	66.5
GE 7000	55.3	62.8	64.1	65.7	67.2	67.4	67.6	67.8	68.2	68.2	68.5	68.5	68.6	68.7	68.7	68.7
GE 6000	56.1	64.1	65.6	67.2	68.7	68.9	69.1	69.4	69.7	69.7	70.0	70.0	70.1	70.2	70.2	70.2
GE 5000	57.4	66.0	68.0	69.6	71.3	71.5	71.8	72.0	72.4	72.4	72.8	72.8	72.9	73.0	73.0	73.0
GE 4500	57.4	66.1	68.1	69.8	71.5	71.7	72.0	72.3	72.6	72.6	73.0	73.0	73.1	73.2	73.2	73.2
GE 4000	58.3	67.6	70.0	71.8	74.1	74.4	74.9	75.2	75.5	75.9	76.6	76.7	76.8	76.9	76.9	76.9
GE 3500	59.0	68.8	71.2	73.1	75.4	75.8	76.5	76.7	77.0	77.4	78.1	78.2	78.3	78.4	78.4	78.4
GE 3000	60.2	70.3	73.1	75.3	77.6	78.2	78.8	79.0	79.5	80.2	80.9	81.0	81.1	81.2	81.2	81.2
GE 2500	60.5	71.4	74.3	76.6	79.0	79.8	80.5	80.8	81.2	82.0	82.7	82.8	83.1	83.2	83.3	83.3
GE 2000	61.0	72.2	75.5	77.8	80.5	81.6	82.6	82.9	83.3	84.6	85.4	85.5	86.0	86.1	86.2	86.3
GE 1800	61.2	72.7	76.0	78.4	81.1	82.4	83.3	83.7	84.1	85.4	86.1	86.2	86.8	86.9	87.0	87.1
GE 1500	61.9	74.2	78.0	80.6	83.3	84.8	85.9	86.2	86.7	88.0	88.8	88.9	89.6	89.7	89.9	90.0
GE 1200	63.1	75.7	80.1	82.8	85.5	87.1	88.3	88.7	89.2	90.5	91.4	91.5	92.2	92.3	92.5	92.6
GE 1000	63.3	76.6	81.1	83.9	87.1	88.7	90.2	90.9	91.4	92.7	93.9	94.0	94.6	94.7	95.1	95.2
GE 900	63.3	76.6	81.1	84.0	87.2	88.9	90.5	91.2	91.7	93.0	94.2	94.3	94.9	95.1	95.4	95.5
GE 800	63.3	76.6	81.2	84.2	87.4	89.1	91.1	91.7	92.5	93.8	94.9	95.1	95.7	95.8	96.1	96.2
GE 700	63.4	77.0	81.9	85.2	88.4	90.1	92.0	92.7	93.4	94.7	95.9	96.0	96.7	96.8	97.1	97.2
GE 600	63.7	77.2	82.2	85.4	88.7	90.4	92.4	93.0	93.8	95.1	96.5	96.6	97.3	97.4	97.7	97.8
GE 500	63.7	77.2	82.2	85.4	88.7	90.4	92.4	93.0	93.8	95.1	96.5	96.6	97.4	97.6	98.2	98.4
GE 400	63.7	77.2	82.2	85.4	88.9	90.6	92.6	93.2	94.0	95.3	96.7	96.8	97.6	97.8	98.4	98.6
GE 300	63.7	77.2	82.2	85.4	88.9	90.6	92.8	93.4	94.2	95.5	96.9	97.0	97.8	98.1	98.7	99.1
GE 200	63.7	77.2	82.2	85.4	88.9	90.6	92.8	93.4	94.2	95.5	96.9	97.0	98.0	98.2	98.8	99.2
GE 100	63.7	77.2	82.2	85.4	88.9	90.6	92.8	93.4	94.2	95.5	96.9	97.0	98.0	98.2	99.0	99.8
GE 0	63.7	77.2	82.2	85.4	88.9	90.6	92.8	93.4	94.2	95.5	96.9	97.0	98.0	98.2	99.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87

MONTH: JAN HOURS(IST): 1500-1700

CEILING IN FEET	VISIBILITY IN STATUTE MILES																
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2	GE 1 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	43.5	47.6	48.2	48.7	49.7	49.9	50.1	50.2	50.4	50.5	50.6	50.6	50.8	50.8	50.9	51.2	
GE 20000	49.4	54.6	55.3	56.0	57.0	57.2	57.5	57.6	57.8	58.0	58.2	58.2	58.3	58.3	58.4	58.7	
GE 18000	49.4	54.6	55.3	56.1	57.1	57.3	57.6	57.7	58.0	58.1	58.3	58.3	58.4	58.4	58.5	58.8	
GE 16000	49.4	54.6	55.3	56.1	57.1	57.3	57.6	57.7	58.0	58.1	58.3	58.3	58.4	58.4	58.5	58.8	
GE 14000	50.1	55.8	56.5	57.4	58.4	58.6	58.9	59.0	59.2	59.4	59.6	59.6	59.7	59.7	59.8	60.1	
GE 12000	50.3	56.1	56.9	58.0	58.9	59.1	59.5	59.6	59.8	59.9	60.1	60.1	60.2	60.2	60.3	60.6	
GE 10000	52.5	59.5	60.6	61.7	62.8	63.1	63.4	63.5	63.8	63.9	64.1	64.1	64.2	64.2	64.3	64.6	
GE 9000	52.9	60.1	61.4	62.6	63.8	64.1	64.6	64.7	64.9	65.1	65.3	65.3	65.4	65.4	65.5	65.8	
GE 8000	55.2	63.0	64.4	65.8	67.0	67.3	68.1	68.2	68.4	68.5	68.8	68.8	68.9	68.9	69.0	69.4	
GE 7000	56.2	64.5	65.9	67.4	68.6	68.9	69.8	70.0	70.2	70.3	70.6	70.6	70.9	70.9	71.0	71.3	
GE 6000	57.2	65.8	67.2	68.7	69.9	70.2	71.1	71.3	71.5	71.6	71.9	71.9	72.2	72.2	72.3	72.6	
GE 5000	57.8	67.1	68.8	70.3	71.7	72.2	73.0	73.3	73.5	73.7	74.0	74.0	74.2	74.2	74.3	74.6	
GE 4500	57.8	67.4	69.1	70.6	72.0	72.5	73.3	73.7	73.9	74.0	74.3	74.3	74.5	74.5	74.6	74.9	
GE 4000	58.8	69.2	71.1	73.0	74.9	75.7	77.0	77.3	77.6	78.2	78.5	78.5	78.7	78.7	78.8	79.1	
GE 3500	59.2	69.7	71.5	73.5	75.5	76.3	77.6	78.0	78.3	78.8	79.1	79.1	79.4	79.4	79.5	79.8	
GE 3000	60.3	71.2	73.2	75.4	77.5	78.4	80.0	80.3	80.6	81.2	81.7	81.7	81.9	81.9	82.0	82.4	
GE 2500	60.8	72.2	74.2	76.6	78.7	79.6	81.3	81.6	81.9	82.6	83.1	83.1	83.4	83.4	83.5	83.9	
GE 2000	61.4	73.8	75.8	78.3	80.5	81.8	83.5	84.2	84.5	85.5	86.0	86.0	86.5	86.5	86.6	86.9	
GE 1800	61.5	74.3	76.5	78.9	81.3	82.6	84.3	84.9	85.3	86.2	86.8	86.8	87.2	87.2	87.3	87.6	
GE 1500	61.9	74.8	77.0	79.7	82.6	84.1	85.9	86.6	86.9	88.1	88.9	88.9	89.4	89.4	89.5	89.8	
GE 1200	62.6	76.5	78.8	81.7	84.7	86.3	88.2	88.8	89.1	90.3	91.2	91.2	91.6	91.6	91.7	92.0	
GE 1000	63.3	77.5	80.2	83.4	86.7	88.3	90.4	91.2	91.5	92.8	93.8	93.8	94.2	94.2	94.5	94.8	
GE 900	63.4	77.8	80.5	84.0	87.2	88.8	91.0	91.7	92.0	93.3	94.3	94.3	94.7	94.7	95.1	95.4	
GE 800	63.4	78.2	81.3	84.7	88.0	89.6	91.7	92.6	92.9	94.5	95.7	95.7	96.1	96.1	96.5	96.8	
GE 700	63.5	78.8	81.9	85.7	88.9	90.5	92.7	93.5	93.9	95.5	96.7	96.7	97.1	97.1	97.4	97.7	
GE 600	63.5	78.8	81.9	85.8	89.0	90.6	93.1	94.0	94.3	95.9	97.1	97.1	97.7	97.7	98.1	98.4	
GE 500	63.5	78.8	81.9	85.8	89.1	90.8	93.2	94.1	94.4	96.1	97.3	97.3	98.0	98.0	98.6	98.9	
GE 400	63.5	78.9	82.0	85.9	89.2	90.9	93.3	94.2	94.5	96.2	97.4	97.4	98.1	98.1	98.7	99.0	
GE 300	63.5	78.9	82.0	85.9	89.2	90.9	93.3	94.2	94.5	96.2	97.4	97.4	98.1	98.1	98.7	99.2	
GE 200	63.5	78.9	82.0	85.9	89.2	90.9	93.3	94.2	94.5	96.2	97.4	97.4	98.1	98.1	98.7	99.2	
GE 100	63.5	78.9	82.0	85.9	89.2	90.9	93.3	94.2	94.5	96.2	97.4	97.4	98.1	98.1	98.7	99.6	
GE 0	63.5	78.9	82.0	85.9	89.2	90.9	93.3	94.2	94.5	96.2	97.4	97.4	98.1	98.1	98.7	100.0	

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS (LST): 1800-2000

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	46.2	48.5	49.0	49.0	49.4	49.4	49.7	49.9	49.9	50.0	50.0	50.0	50.0	50.2	50.2	50.5
GE 20000	51.1	54.0	54.6	54.7	55.1	55.1	55.4	55.6	55.6	55.7	55.7	55.7	55.7	55.9	55.9	56.2
GE 18000	51.1	54.0	54.6	54.7	55.1	55.1	55.4	55.6	55.6	55.7	55.7	55.7	55.7	55.9	55.9	56.2
GE 16000	51.2	54.1	54.7	54.8	55.2	55.2	55.5	55.7	55.7	55.8	55.8	55.8	55.8	56.0	56.0	56.3
GE 14000	51.6	54.6	55.3	55.4	55.7	55.7	56.0	56.2	56.2	56.3	56.3	56.3	56.3	56.6	56.6	56.9
GE 12000	52.5	55.6	56.2	56.3	56.7	56.7	57.0	57.2	57.2	57.3	57.3	57.3	57.3	57.5	57.5	57.8
GE 10000	55.8	58.9	60.0	60.2	60.8	60.8	61.1	61.3	61.3	61.4	61.4	61.4	61.4	61.6	61.6	61.9
GE 9000	56.2	59.4	60.4	60.6	61.2	61.2	61.8	62.0	62.0	62.2	62.2	62.2	62.2	62.4	62.4	62.7
GE 8000	58.3	61.5	62.9	63.1	63.9	63.9	65.1	65.3	65.3	65.4	65.4	65.4	65.4	65.6	65.6	65.9
GE 7000	59.0	62.6	64.0	64.2	64.9	64.9	66.2	66.5	66.5	66.6	66.6	66.6	66.6	66.8	66.8	67.1
GE 6000	60.3	64.6	66.1	66.3	67.2	67.2	68.5	68.7	68.7	68.8	68.8	68.8	68.8	69.0	69.0	69.4
GE 5000	61.3	66.2	68.1	68.6	70.0	70.0	71.3	71.6	71.6	71.7	71.7	71.7	71.9	72.2	72.2	72.5
GE 4500	61.6	66.8	68.6	69.1	70.8	70.8	72.3	72.6	72.6	72.7	72.7	72.7	72.9	73.1	73.1	73.4
GE 4000	63.2	69.6	71.6	72.6	74.3	74.3	76.2	76.6	76.6	76.9	76.9	76.9	77.1	77.3	77.3	77.6
GE 3500	63.9	70.3	72.4	73.4	75.2	75.2	77.3	77.6	77.6	78.0	78.0	78.0	78.2	78.4	78.4	78.7
GE 3000	64.7	71.7	74.0	75.4	77.5	77.8	80.4	80.8	80.8	81.4	81.5	81.5	81.7	81.9	81.9	82.3
GE 2500	64.8	72.4	74.7	76.1	78.6	78.9	81.6	81.9	81.9	82.6	82.7	82.7	82.9	83.1	83.1	83.4
GE 2000	65.6	73.9	76.6	78.1	80.6	81.0	83.7	84.0	84.0	85.2	85.3	85.3	85.5	85.7	85.7	86.0
GE 1800	65.9	74.2	77.0	78.6	81.2	81.5	84.3	84.7	84.7	85.9	86.0	86.0	86.2	86.5	86.5	86.8
GE 1500	66.5	75.3	78.4	80.0	82.8	83.4	86.6	87.2	87.2	88.5	88.6	88.6	88.8	89.0	89.0	89.4
GE 1200	67.0	77.3	80.8	82.7	85.6	86.2	89.8	90.5	90.5	91.8	92.0	92.0	92.3	92.5	92.5	92.8
GE 1000	67.2	78.2	81.6	83.5	86.7	87.3	91.1	91.9	91.9	93.3	93.5	93.5	93.8	94.0	94.0	94.3
GE 900	67.8	78.8	82.5	84.4	87.5	88.2	91.9	92.8	92.9	94.3	94.5	94.5	94.7	94.9	94.9	95.3
GE 800	68.2	79.6	83.4	85.5	88.6	89.2	93.0	93.9	94.0	95.7	95.9	95.9	96.1	96.3	96.3	96.7
GE 700	68.2	79.7	83.7	85.8	89.1	89.8	93.5	94.4	94.5	96.2	96.5	96.5	96.7	96.9	96.9	97.2
GE 600	68.2	79.9	84.2	86.3	89.7	90.3	94.1	94.9	95.1	96.8	97.0	97.0	97.2	97.4	97.4	97.7
GE 500	68.2	79.9	84.3	86.5	89.8	90.4	94.2	95.1	95.2	96.9	97.1	97.1	97.3	97.6	97.7	98.1
GE 400	68.3	80.1	84.6	86.8	90.1	90.8	94.7	95.6	95.7	97.5	97.8	97.8	98.1	98.4	98.5	98.8
GE 300	68.3	80.1	84.6	86.8	90.1	90.8	94.7	95.6	95.8	97.6	98.0	98.0	98.3	98.6	98.9	99.2
GE 200	68.3	80.1	84.6	86.8	90.1	90.8	94.7	95.6	95.8	97.6	98.0	98.0	98.3	98.6	98.9	99.2
GE 100	68.3	80.1	84.6	86.8	90.1	90.8	94.7	95.6	95.8	97.6	98.0	98.0	98.3	98.6	98.9	99.7
GE 0	68.3	80.1	84.6	86.8	90.1	90.8	94.7	95.6	95.8	97.6	98.0	98.0	98.3	98.6	98.9	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87

MONTH: JAN HOURS(IST): 2100-2300

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	47.0	50.3	50.8	50.9	51.1	51.3	51.4	51.5	51.5	51.7	51.9	51.9	51.9	51.9	52.0	52.2
GE 20000	50.2	53.7	54.1	54.2	54.4	54.6	54.7	54.8	54.8	55.1	55.3	55.3	55.5	55.5	55.6	55.7
GE 18000	50.4	53.9	54.3	54.4	54.6	54.8	54.9	55.1	55.1	55.3	55.5	55.5	55.7	55.7	55.8	55.9
GE 16000	50.4	53.9	54.3	54.4	54.6	54.8	54.9	55.1	55.1	55.3	55.5	55.5	55.7	55.7	55.8	55.9
GE 14000	50.4	53.9	54.3	54.4	54.6	54.8	54.9	55.1	55.1	55.3	55.5	55.5	55.7	55.7	55.8	55.9
GE 12000	51.3	54.7	55.2	55.3	55.5	55.7	55.8	55.9	55.9	56.1	56.3	56.3	56.6	56.6	56.7	56.8
GE 10000	53.5	57.0	57.7	58.0	58.4	58.6	58.8	58.9	58.9	59.2	59.5	59.5	59.7	59.7	59.8	59.9
GE 9000	54.2	57.6	58.4	58.6	59.0	59.2	59.5	59.6	59.6	59.9	60.1	60.1	60.3	60.3	60.4	60.5
GE 8000	55.6	59.5	60.3	60.5	61.0	61.2	61.4	61.5	61.5	61.8	62.0	62.0	62.3	62.3	62.4	62.5
GE 7000	56.6	60.5	61.4	61.7	62.2	62.4	62.6	62.7	62.7	63.0	63.2	63.2	63.4	63.4	63.5	63.7
GE 6000	57.8	62.3	63.1	63.4	64.1	64.3	64.5	64.6	64.6	65.1	65.3	65.3	65.5	65.5	65.6	65.7
GE 5000	59.6	64.9	66.2	67.2	68.1	68.3	68.5	68.6	68.6	69.2	69.5	69.5	69.8	69.8	69.9	70.0
GE 4500	60.0	65.4	66.7	67.6	68.6	68.9	69.1	69.2	69.2	69.9	70.1	70.1	70.4	70.4	70.5	70.6
GE 4000	62.3	68.7	70.3	71.4	73.2	73.7	74.0	74.2	74.2	74.8	75.1	75.1	75.4	75.4	75.5	75.6
GE 3500	62.9	69.5	71.1	72.4	74.5	74.9	75.3	75.5	75.5	76.1	76.3	76.3	76.7	76.7	76.8	76.9
GE 3000	64.7	72.5	74.3	75.7	78.3	78.7	79.0	79.4	79.4	80.1	80.3	80.3	80.6	80.6	80.8	80.9
GE 2500	65.6	73.9	75.7	77.1	79.8	80.5	81.0	81.3	81.3	82.2	82.4	82.4	82.7	82.7	82.8	82.9
GE 2000	67.2	76.0	78.1	79.5	82.6	83.3	83.8	84.2	84.2	85.1	85.3	85.3	85.6	85.6	85.7	85.8
GE 1800	68.1	77.0	79.0	80.4	83.5	84.3	84.7	85.2	85.2	86.0	86.2	86.2	86.6	86.6	86.7	86.8
GE 1500	69.5	79.0	81.5	83.2	86.9	87.6	88.5	88.9	88.9	89.8	90.0	90.0	90.3	90.3	90.4	90.5
GE 1200	70.3	80.2	83.0	85.1	88.7	89.5	90.6	91.1	91.1	91.9	92.3	92.3	92.7	92.7	92.8	92.9
GE 1000	70.8	81.1	83.9	86.0	89.8	90.5	91.8	92.5	92.5	93.3	93.7	93.7	94.2	94.2	94.3	94.4
GE 900	71.2	81.7	84.5	86.7	90.5	91.5	92.8	93.5	93.5	94.4	94.7	94.7	95.3	95.3	95.4	95.5
GE 800	71.4	82.2	84.9	87.1	91.0	91.9	93.2	94.0	94.0	94.8	95.2	95.2	95.7	95.7	95.8	95.9
GE 700	71.4	82.6	85.4	87.6	91.5	92.5	93.8	94.6	94.6	95.5	95.8	95.8	96.3	96.3	96.5	96.6
GE 600	71.5	82.7	85.7	88.0	91.8	92.8	94.3	95.2	95.2	96.3	96.7	96.7	97.2	97.2	97.3	97.4
GE 500	71.5	82.8	85.8	88.1	91.9	92.9	94.4	95.4	95.4	96.8	97.1	97.1	97.6	97.7	97.8	98.0
GE 400	71.6	83.0	86.2	88.5	92.4	93.3	94.8	95.8	95.8	97.3	97.6	97.6	98.2	98.3	98.4	98.5
GE 300	71.6	83.1	86.3	88.6	92.5	93.4	94.9	95.9	95.9	97.4	97.7	97.7	98.5	98.6	98.7	98.8
GE 200	71.6	83.1	86.3	88.6	92.5	93.4	94.9	95.9	95.9	97.7	98.1	98.1	98.9	99.0	99.1	99.2
GE 100	71.6	83.1	86.3	88.6	92.5	93.4	94.9	95.9	95.9	97.8	98.2	98.2	99.0	99.1	99.2	99.7
GE 0	71.6	83.1	86.3	88.6	92.5	93.4	94.9	95.9	95.9	97.8	98.2	98.2	99.0	99.1	99.2	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87

MONTH: JAN

HOURS(IST):

ALL

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 3	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	46.3	49.3	49.8	50.1	50.7	50.8	51.1	51.3	51.4	51.7	51.8	51.8	51.9	52.0	52.0	52.1
GE 20000	49.9	53.5	54.1	54.5	55.1	55.3	55.6	55.8	55.8	56.1	56.3	56.3	56.5	56.5	56.5	56.6
GE 18000	49.9	53.6	54.1	54.6	55.2	55.4	55.7	55.9	55.9	56.2	56.4	56.4	56.5	56.6	56.6	56.7
GE 16000	50.0	53.6	54.1	54.6	55.3	55.4	55.7	55.9	56.0	56.2	56.4	56.4	56.6	56.6	56.6	56.7
GE 14000	50.4	54.1	54.7	55.1	55.8	55.9	56.3	56.4	56.5	56.8	56.9	56.9	57.1	57.2	57.2	57.3
GE 12000	50.8	54.6	55.1	55.6	56.3	56.4	56.7	56.9	57.0	57.3	57.4	57.4	57.6	57.6	57.7	57.8
GE 10000	53.6	58.0	58.7	59.3	60.0	60.2	60.5	60.7	60.8	61.1	61.2	61.2	61.4	61.4	61.5	61.6
GE 9000	54.2	58.6	59.3	59.9	60.7	60.8	61.3	61.4	61.5	61.8	61.9	61.9	62.1	62.2	62.2	62.3
GE 8000	56.1	60.8	61.8	62.4	63.2	63.4	63.9	64.1	64.2	64.4	64.6	64.6	64.8	64.8	64.9	65.0
GE 7000	57.2	62.1	63.1	63.8	64.7	64.9	65.4	65.7	65.7	66.0	66.2	66.2	66.4	66.4	66.5	66.6
GE 6000	58.4	63.7	64.8	65.5	66.5	66.7	67.3	67.5	67.6	67.9	68.1	68.1	68.3	68.3	68.4	68.5
GE 5000	59.9	65.8	67.2	68.1	69.4	69.6	70.2	70.5	70.6	70.9	71.1	71.1	71.3	71.4	71.4	71.5
GE 4500	60.2	66.4	67.7	68.7	70.0	70.2	70.9	71.1	71.2	71.6	71.8	71.8	72.0	72.0	72.1	72.2
GE 4000	61.9	69.1	70.8	72.0	73.6	73.9	74.9	75.1	75.2	75.8	76.0	76.0	76.2	76.3	76.3	76.4
GE 3500	62.5	69.8	71.5	72.8	74.5	74.9	75.9	76.2	76.3	76.8	77.1	77.1	77.3	77.4	77.4	77.5
GE 3000	63.9	71.8	73.8	75.3	77.4	77.8	78.9	79.3	79.4	80.1	80.4	80.4	80.6	80.7	80.7	80.8
GE 2500	64.7	73.0	75.1	76.7	78.9	79.5	80.7	81.1	81.2	81.9	82.2	82.2	82.5	82.6	82.6	82.7
GE 2000	66.2	75.2	77.5	79.2	81.7	82.4	83.8	84.2	84.4	85.3	85.6	85.6	85.9	86.0	86.1	86.2
GE 1800	66.6	75.7	78.0	79.7	82.2	83.0	84.4	84.9	85.0	85.9	86.3	86.3	86.6	86.7	86.7	86.8
GE 1500	67.7	77.3	79.7	81.7	84.4	85.3	87.0	87.5	87.6	88.6	89.0	89.0	89.4	89.5	89.5	89.7
GE 1200	68.8	78.9	81.6	83.7	86.5	87.4	89.2	89.8	89.9	91.0	91.4	91.4	91.9	91.9	92.0	92.1
GE 1000	69.2	79.7	82.6	84.8	87.7	88.7	90.7	91.4	91.6	92.6	93.2	93.2	93.6	93.8	93.9	94.0
GE 900	69.5	80.2	83.0	85.3	88.2	89.2	91.3	92.0	92.2	93.3	93.8	93.8	94.3	94.4	94.6	94.7
GE 800	69.6	80.4	83.4	85.7	88.7	89.7	91.8	92.5	92.8	94.0	94.6	94.6	95.0	95.2	95.3	95.4
GE 700	69.7	80.8	83.9	86.2	89.4	90.4	92.5	93.3	93.5	94.8	95.4	95.4	95.9	96.0	96.2	96.3
GE 600	69.9	81.0	84.2	86.6	89.8	90.9	93.0	93.9	94.1	95.5	96.1	96.2	96.7	96.8	96.9	97.1
GE 500	69.9	81.1	84.3	86.7	90.1	91.2	93.3	94.2	94.5	96.0	96.6	96.6	97.2	97.4	97.6	97.8
GE 400	69.9	81.4	84.6	87.1	90.5	91.5	93.8	94.7	94.9	96.5	97.2	97.2	97.8	97.9	98.2	98.3
GE 300	69.9	81.4	84.7	87.1	90.5	91.6	93.9	94.9	95.1	96.7	97.4	97.4	98.1	98.3	98.6	98.8
GE 200	69.9	81.4	84.7	87.1	90.5	91.6	93.9	94.9	95.2	96.9	97.6	97.6	98.5	98.7	99.0	99.2
GE 100	69.9	81.4	84.7	87.1	90.5	91.6	93.9	94.9	95.2	96.9	97.6	97.7	98.5	98.7	99.3	99.7
GE 0	69.9	81.4	84.7	87.1	90.5	91.6	93.9	94.9	95.2	96.9	97.6	97.7	98.5	98.7	99.3	100.0

TOTAL NUMBER OF OBSERVATIONS: 7440

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87

MONTH: FEB HOURS(IST): 0000-0200

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	42.8	44.9	45.0	45.5	46.0	46.1	46.3	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.7
GE 20000	45.5	47.9	48.0	48.5	48.9	49.1	49.3	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.6
GE 18000	45.5	47.9	48.0	48.5	48.9	49.1	49.3	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.6
GE 16000	45.5	47.9	48.0	48.5	48.9	49.1	49.3	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.6
GE 14000	46.3	48.7	48.8	49.3	49.8	49.9	50.1	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.5
GE 12000	46.9	49.3	49.4	49.9	50.4	50.5	50.7	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	51.1
GE 10000	49.6	52.4	52.8	53.3	53.8	53.9	54.1	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.5
GE 9000	50.5	53.2	53.7	54.1	54.6	54.7	55.0	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.3
GE 8000	52.2	55.1	55.8	56.3	56.9	57.0	57.2	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.6
GE 7000	53.1	56.0	56.7	57.2	57.8	57.9	58.2	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.6
GE 6000	53.9	57.1	57.8	58.3	58.9	59.0	59.2	59.5	59.5	59.5	59.5	59.5	59.5	59.5	59.5	59.7
GE 5000	56.3	60.0	60.8	61.2	61.8	62.2	62.4	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.9
GE 4500	56.7	60.5	61.2	61.7	62.3	62.6	62.9	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.4
GE 4000	58.7	62.8	63.8	64.4	65.1	65.5	65.7	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.2
GE 3500	60.2	64.7	65.7	66.5	67.3	67.6	67.8	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.3
GE 3000	61.8	67.0	68.6	69.4	70.3	70.7	71.0	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.6
GE 2500	63.4	69.3	70.8	71.7	73.2	73.5	73.9	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.6
GE 2000	65.7	72.8	74.6	76.0	78.3	78.6	79.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.5
GE 1800	66.3	73.4	75.2	76.6	79.0	79.3	80.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.2
GE 1500	67.5	74.8	76.8	78.4	81.0	81.3	82.3	83.5	83.6	83.7	83.7	83.7	83.7	83.7	83.7	83.9
GE 1200	68.3	76.2	78.4	79.9	82.5	83.1	84.3	85.5	85.6	85.8	86.1	86.1	86.1	86.1	86.1	86.3
GE 1000	69.5	78.5	81.0	82.6	85.3	85.9	87.5	88.8	88.9	89.1	89.5	89.5	89.5	90.2	90.2	90.4
GE 900	69.5	78.5	81.1	82.7	85.5	86.1	87.7	89.0	89.1	89.4	89.7	89.7	89.7	90.4	90.4	90.7
GE 800	70.1	79.4	82.0	83.7	86.4	87.0	88.8	90.1	90.3	90.8	91.1	91.1	91.1	91.8	91.8	92.1
GE 700	70.1	80.0	82.7	84.4	87.1	87.7	89.5	90.8	91.0	91.5	91.8	91.8	91.8	92.6	92.6	92.8
GE 600	70.4	80.7	83.6	85.2	87.9	88.5	90.5	91.8	92.3	92.8	93.1	93.1	93.1	93.9	93.9	94.1
GE 500	70.6	81.0	83.8	85.6	88.5	89.1	91.3	92.6	93.0	93.5	93.9	93.9	93.9	94.6	94.6	94.8
GE 400	70.6	81.1	84.2	86.4	89.8	90.4	92.6	94.0	94.6	95.0	95.4	95.4	95.4	96.1	96.1	96.3
GE 300	70.6	81.1	84.2	86.4	90.1	90.7	93.0	94.4	95.4	95.9	96.5	96.5	96.5	97.3	97.3	97.8
GE 200	70.6	81.1	84.2	86.5	90.2	90.8	93.1	94.7	95.7	96.8	97.4	97.4	97.4	98.7	98.7	99.6
GE 100	70.6	81.1	84.2	86.5	90.2	90.8	93.1	94.7	95.7	96.8	97.4	97.4	97.4	98.7	98.7	100.0
GE 0	70.6	81.1	84.2	86.5	90.2	90.8	93.1	94.7	95.7	96.8	97.4	97.4	97.4	98.7	98.7	100.0

TOTAL NUMBER OF OBSERVATIONS: 846



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(IST): 0300-0500

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	41.7	43.7	44.1	44.4	45.3	45.3	45.3	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.6
GE 20000	44.8	46.8	47.2	47.5	48.7	48.7	48.7	48.9	48.9	48.9	48.9	48.9	48.9	48.9	48.9	49.1
GE 18000	44.8	46.8	47.2	47.8	48.9	48.9	48.9	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.3
GE 16000	44.8	46.8	47.2	47.8	48.9	48.9	48.9	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.3
GE 14000	46.2	48.2	48.6	49.2	50.4	50.4	50.4	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.7
GE 12000	46.8	48.8	49.2	49.8	50.9	50.9	50.9	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.2	51.3
GE 10000	48.8	51.4	51.8	52.7	53.9	53.9	53.9	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.3
GE 9000	49.4	52.0	52.4	53.3	54.5	54.5	54.5	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.8
GE 8000	51.4	54.0	54.6	55.8	57.1	57.1	57.1	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.4
GE 7000	52.2	55.0	55.6	56.7	58.0	58.0	58.0	58.3	58.3	58.3	58.3	58.3	58.3	58.3	58.3	58.4
GE 6000	53.3	56.1	56.9	58.3	59.6	59.6	59.6	59.8	59.8	59.8	59.9	59.9	59.9	59.9	59.9	60.0
GE 5000	56.4	59.2	59.9	61.3	62.8	63.1	63.1	63.4	63.4	63.5	63.5	63.5	63.5	63.5	63.5	63.6
GE 4500	57.0	59.8	60.5	61.9	63.4	63.7	63.7	63.9	63.9	64.1	64.1	64.1	64.1	64.1	64.1	64.2
GE 4000	58.7	61.9	62.9	64.5	66.1	66.4	66.4	66.7	66.7	66.8	66.8	66.8	66.8	66.8	66.8	66.9
GE 3500	60.0	63.5	64.4	66.4	68.0	68.3	68.3	68.6	68.6	68.7	68.7	68.7	68.7	68.7	68.7	68.8
GE 3000	61.9	65.8	66.9	69.1	70.8	71.2	71.2	71.5	71.5	71.6	71.6	71.6	71.6	71.6	71.6	71.7
GE 2500	63.9	68.2	69.4	71.9	73.6	74.1	74.1	74.5	74.5	74.6	74.6	74.6	74.6	74.6	74.6	74.7
GE 2000	65.7	71.0	72.5	75.2	77.1	77.5	77.5	78.4	78.5	78.6	78.6	78.6	78.6	78.6	78.6	78.7
GE 1800	65.8	71.3	72.7	75.4	77.7	78.1	78.1	78.5	79.1	79.2	79.3	79.6	79.6	79.6	79.6	79.7
GE 1500	67.7	74.0	75.4	78.1	80.5	81.0	81.7	82.3	82.4	82.7	83.1	83.1	83.1	83.1	83.1	83.2
GE 1200	69.3	76.6	78.0	81.0	83.6	84.0	84.9	85.5	85.6	85.9	86.3	86.3	86.3	86.3	86.3	86.4
GE 1000	70.6	78.7	80.1	83.1	86.1	86.5	87.6	88.2	88.3	88.7	89.0	89.0	89.2	89.2	89.2	89.4
GE 900	70.7	79.1	80.6	83.6	86.5	87.0	88.2	89.0	89.2	89.6	90.0	90.0	90.2	90.2	90.2	90.3
GE 800	70.9	79.8	81.4	84.4	87.5	87.9	89.2	90.1	90.3	90.7	91.0	91.0	91.3	91.3	91.3	91.4
GE 700	70.9	80.3	82.3	85.3	88.5	89.0	90.3	91.1	91.4	91.7	92.1	92.1	92.3	92.3	92.3	92.4
GE 600	71.0	80.9	83.1	86.2	89.4	89.8	91.1	92.0	92.2	92.6	92.9	93.1	93.4	93.4	93.4	93.5
GE 500	71.0	81.3	83.8	87.1	90.3	90.8	92.3	93.1	93.4	93.7	94.1	94.3	94.6	94.6	94.6	94.7
GE 400	71.0	81.6	84.3	87.9	91.3	91.7	93.5	94.3	94.6	94.9	95.3	95.5	95.7	95.7	95.7	95.9
GE 300	71.0	81.6	84.3	87.9	91.4	91.8	93.7	94.7	95.2	95.6	96.0	96.2	96.6	96.6	97.0	97.2
GE 200	71.0	81.7	84.4	88.1	91.6	92.2	94.1	95.3	96.0	96.6	96.9	97.2	97.6	97.6	98.6	99.2
GE 100	71.0	81.7	84.4	88.1	91.6	92.2	94.1	95.3	96.0	96.9	97.4	97.6	98.2	98.2	99.2	99.8
GE 0	71.0	81.7	84.4	88.1	91.6	92.2	94.1	95.3	96.0	96.9	97.4	97.6	98.2	98.2	99.2	100.0

TOTAL NUMBER OF OBSERVATIONS: 846

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(IST): 0600-0800

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	45.3	46.7	47.0	47.3	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5
GE 20000	46.9	48.3	48.7	48.9	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
GE 18000	47.2	48.6	48.9	49.2	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5
GE 16000	47.2	48.6	48.9	49.2	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5
GE 14000	47.5	49.1	49.4	49.6	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
GE 12000	48.6	50.1	50.5	50.8	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3
GE 10000	50.8	53.0	53.4	53.8	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.4	54.4
GE 9000	51.4	53.5	54.0	54.4	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	54.8	55.0	55.0
GE 8000	53.3	55.6	56.4	56.7	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.6	57.6
GE 7000	53.7	56.3	57.1	57.6	58.3	58.3	58.3	58.3	58.3	58.3	58.3	58.3	58.3	58.3	58.4	58.4
GE 6000	54.6	57.3	58.3	58.9	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.8	59.8
GE 5000	57.4	60.5	61.6	62.2	63.1	63.4	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.6	63.6
GE 4500	58.7	61.8	62.9	63.7	64.7	64.9	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.1	65.1
GE 4000	59.8	63.6	64.8	65.7	66.9	67.1	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.6	67.6
GE 3500	60.6	64.5	65.8	67.0	68.2	68.4	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.9	68.9
GE 3000	62.3	66.5	68.1	69.5	71.2	71.4	71.7	72.0	72.1	72.1	72.1	72.1	72.1	72.1	72.2	72.2
GE 2500	63.2	68.0	69.6	71.0	72.7	73.2	73.5	73.9	74.0	74.0	74.0	74.0	74.0	74.0	74.1	74.1
GE 2000	65.0	70.1	71.7	73.2	75.1	75.8	76.5	77.1	77.2	77.2	77.2	77.2	77.2	77.2	77.3	77.3
GE 1800	65.2	70.3	72.0	73.4	75.7	76.4	77.1	77.7	77.8	77.8	77.8	77.8	77.8	77.8	77.9	77.9
GE 1500	66.8	72.6	74.2	75.7	78.0	78.7	79.4	80.3	80.4	80.5	80.5	80.5	80.5	80.5	80.6	80.6
GE 1200	69.1	75.4	77.1	78.5	81.3	82.2	83.3	84.2	84.3	84.4	84.6	84.6	84.6	84.6	84.8	84.8
GE 1000	70.1	77.2	79.0	80.5	83.7	84.6	86.3	87.1	87.4	87.5	87.7	87.7	87.7	87.7	87.8	87.8
GE 900	70.3	78.1	80.4	81.9	85.2	86.2	87.8	88.7	88.9	89.0	89.2	89.2	89.2	89.2	89.4	89.4
GE 800	70.6	78.8	81.1	82.7	86.1	87.2	89.0	90.0	90.3	90.4	90.7	90.7	90.7	90.8	90.9	90.9
GE 700	70.8	79.2	81.9	83.9	87.2	88.5	90.4	91.4	91.7	92.0	92.2	92.2	92.3	92.3	92.4	92.4
GE 600	70.9	79.6	82.6	84.8	88.2	89.5	91.4	92.3	92.7	92.9	93.3	93.3	93.4	93.4	93.5	93.5
GE 500	70.9	80.1	83.6	85.7	89.2	90.5	92.6	93.6	94.0	94.2	94.6	94.6	94.7	94.7	94.8	94.8
GE 400	70.9	80.4	83.8	86.1	90.0	91.5	93.7	94.8	95.2	95.5	95.9	95.9	96.0	96.0	96.1	96.1
GE 300	70.9	80.4	84.0	86.3	90.3	91.8	94.6	95.7	96.1	96.6	96.9	96.9	97.0	97.0	97.2	97.2
GE 200	70.9	80.4	84.0	86.4	90.5	92.2	94.9	96.2	96.6	97.3	97.9	97.9	98.0	98.0	98.3	98.3
GE 100	70.9	80.4	84.0	86.4	90.5	92.2	94.9	96.2	96.8	97.5	98.3	98.3	98.7	98.7	99.1	99.1
GE 0	70.9	80.4	84.0	86.4	90.5	92.2	94.9	96.2	96.8	97.5	98.3	98.3	98.7	98.7	99.2	100.0

TOTAL NUMBER OF OBSERVATIONS: 846

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(IST): 0900-1100

CEILING IN FEET	VISIBILITY IN STATUTE MILES																
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0	
NO CEIL	40.1	42.8	44.2	45.0	46.0	46.1	46.2	46.3	46.3	46.5	46.5	46.5	46.6	46.7	46.7	46.9	
GE 20000	42.4	45.2	46.7	47.6	48.6	48.7	48.8	48.9	48.9	49.2	49.2	49.2	49.5	49.6	49.6	49.9	
GE 18000	42.6	45.3	46.8	47.9	48.8	48.9	49.1	49.2	49.2	49.4	49.4	49.4	49.8	49.9	49.9	50.1	
GE 16000	42.7	45.4	46.9	48.0	48.9	49.1	49.2	49.3	49.3	49.5	49.5	49.5	49.9	50.0	50.0	50.2	
GE 14000	43.1	46.1	47.6	48.7	49.6	49.8	49.9	50.0	50.0	50.2	50.2	50.2	50.6	50.7	50.7	50.9	
GE 12000	44.2	47.3	48.9	50.0	50.9	51.1	51.2	51.3	51.3	51.5	51.5	51.5	51.9	52.0	52.0	52.2	
GE 10000	46.6	50.5	52.6	53.8	54.7	54.8	55.0	55.1	55.1	55.3	55.3	55.3	55.7	55.8	55.8	56.0	
GE 9000	47.2	51.2	53.3	54.5	55.4	55.6	55.7	55.8	55.8	56.0	56.0	56.0	56.4	56.5	56.5	56.7	
GE 8000	48.6	53.8	56.1	57.3	58.5	58.6	58.7	58.9	58.9	59.1	59.1	59.1	59.5	59.6	59.6	59.8	
GE 7000	49.2	54.5	56.9	58.4	59.6	59.7	59.9	60.0	60.0	60.3	60.3	60.3	60.6	60.8	60.8	61.0	
GE 6000	49.9	55.4	57.8	59.3	60.5	60.6	60.9	61.0	61.0	61.2	61.2	61.2	61.6	61.7	61.7	61.9	
GE 5000	51.3	57.8	60.5	62.4	63.9	64.1	64.8	64.9	64.9	65.1	65.1	65.1	65.5	65.6	65.6	65.8	
GE 4500	52.1	58.6	61.3	63.4	64.9	65.0	65.7	65.8	65.8	66.1	66.1	66.1	66.4	66.5	66.5	66.8	
GE 4000	52.8	60.0	62.8	64.9	66.8	66.9	67.8	68.1	68.1	68.4	68.4	68.4	68.8	68.9	68.9	69.1	
GE 3500	53.8	61.0	63.7	65.8	67.7	67.8	69.1	69.4	69.4	69.7	69.7	69.7	70.1	70.2	70.2	70.4	
GE 3000	55.2	63.0	66.1	68.2	70.4	70.7	72.1	72.3	72.3	72.7	72.7	72.7	73.0	73.2	73.2	73.4	
GE 2500	55.8	63.7	67.0	69.1	71.6	71.9	73.3	73.6	73.6	74.0	74.0	74.0	74.3	74.5	74.5	74.7	
GE 2000	56.5	64.9	68.4	70.7	73.8	74.5	76.1	76.7	76.8	77.3	77.3	77.3	77.8	77.9	77.9	78.1	
GE 1800	56.6	65.1	68.7	70.9	74.0	74.8	76.5	77.1	77.2	77.8	77.8	77.8	78.3	78.4	78.4	78.6	
GE 1500	58.4	67.6	71.5	73.8	77.3	78.1	79.8	80.7	80.9	81.4	81.4	81.4	81.9	82.0	82.0	82.3	
GE 1200	59.7	69.6	73.6	75.9	79.4	80.3	81.9	82.9	83.0	83.9	83.9	83.9	84.4	84.5	84.5	84.8	
GE 1000	60.6	71.0	75.4	77.9	81.6	82.5	84.5	85.5	85.6	87.0	87.0	87.0	87.6	87.7	87.7	87.9	
GE 900	60.8	71.4	75.9	78.4	82.2	83.1	85.2	86.3	86.5	88.2	88.2	88.2	88.8	88.9	88.9	89.2	
GE 800	60.8	72.0	76.5	79.3	83.1	84.4	86.8	87.9	88.4	90.2	90.3	90.3	90.9	91.0	91.1	91.4	
GE 700	61.5	72.8	77.5	80.7	84.6	85.9	88.3	89.5	90.0	91.8	92.1	92.1	92.8	92.9	93.0	93.3	
GE 600	61.6	73.3	78.1	81.7	85.8	87.1	89.5	90.7	91.1	93.1	93.5	93.5	94.3	94.4	94.6	94.8	
GE 500	61.6	73.6	78.7	82.4	87.0	88.5	91.1	92.3	93.0	95.3	95.6	95.7	96.7	96.8	96.9	97.2	
GE 400	61.6	73.6	78.7	82.4	87.1	88.8	92.0	93.6	94.3	96.6	96.9	97.0	98.0	98.1	98.2	98.5	
GE 300	61.6	73.6	78.7	82.4	87.1	88.8	92.3	94.0	94.7	96.9	97.3	97.5	98.5	98.6	98.7	98.9	
GE 200	61.6	73.6	78.7	82.4	87.1	88.8	92.3	94.0	94.7	97.2	97.5	97.8	98.8	98.9	99.4	99.6	
GE 100	61.6	73.6	78.7	82.4	87.1	88.8	92.3	94.0	94.7	97.2	97.5	97.8	98.9	99.1	99.8	100.0	
GE 0	61.6	73.6	78.7	82.4	87.1	88.8	92.3	94.0	94.7	97.2	97.5	97.8	98.9	99.1	99.8	100.0	

TOTAL NUMBER OF OBSERVATIONS: 846

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(LST): 1200-1400

CEILING		VISIBILITY IN STATUTE MILES																
IN FEET	GE 1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0	
NO CEIL	40.3	44.8	44.9	46.1	47.8	47.8	48.0	48.0	48.3	48.6	49.2	49.2	49.2	49.2	49.2	49.2	49.2	
GE 20000	44.4	49.5	50.0	51.2	53.0	53.0	53.2	53.2	53.5	53.8	54.4	54.4	54.4	54.4	54.4	54.4	54.4	
GE 18000	44.4	49.5	50.0	51.2	53.0	53.0	53.2	53.2	53.5	53.8	54.4	54.4	54.4	54.4	54.4	54.4	54.4	
GE 16000	44.4	49.5	50.0	51.2	53.0	53.0	53.2	53.2	53.5	53.8	54.4	54.4	54.4	54.4	54.4	54.4	54.4	
GE 14000	44.6	49.6	50.1	51.3	53.2	53.2	53.4	53.4	53.8	54.0	54.6	54.6	54.6	54.6	54.6	54.6	54.6	
GE 12000	45.3	50.7	51.2	52.4	54.3	54.3	54.5	54.5	54.8	55.1	55.7	55.7	55.7	55.7	55.7	55.7	55.7	
GE 10000	47.2	53.1	53.8	55.2	57.2	57.2	57.4	57.4	57.8	58.0	58.6	58.6	58.6	58.6	58.6	58.6	58.6	
GE 9000	47.2	53.1	53.8	55.2	57.2	57.2	57.4	57.4	57.8	58.0	58.6	58.6	58.6	58.6	58.6	58.6	58.6	
GE 8000	48.3	54.7	55.6	57.6	59.8	59.8	60.0	60.0	60.4	60.6	61.2	61.2	61.2	61.2	61.2	61.2	61.2	
GE 7000	48.7	55.1	56.0	58.0	60.5	60.6	61.0	61.0	61.3	61.6	62.2	62.2	62.2	62.2	62.2	62.2	62.2	
GE 6000	48.9	55.4	56.5	58.9	61.3	61.5	61.8	61.8	62.2	62.4	63.0	63.0	63.0	63.0	63.0	63.0	63.0	
GE 5000	49.6	56.1	57.3	60.0	62.9	63.0	63.5	63.6	63.9	64.2	64.9	64.9	64.9	64.9	64.9	64.9	64.9	
GE 4500	50.0	56.5	57.7	60.4	63.2	63.4	63.8	64.1	64.4	64.8	65.5	65.5	65.5	65.5	65.5	65.5	65.5	
GE 4000	52.2	59.3	60.6	63.4	66.5	66.8	67.3	67.6	68.0	68.6	69.3	69.3	69.3	69.3	69.3	69.3	69.3	
GE 3500	52.6	60.0	61.3	64.2	67.4	67.6	68.2	68.6	68.9	69.5	70.2	70.2	70.2	70.2	70.2	70.2	70.2	
GE 3000	54.0	61.8	63.1	66.1	69.6	69.9	70.7	71.0	71.4	72.0	72.8	72.8	72.8	72.8	72.8	72.8	72.8	
GE 2500	54.8	63.0	64.3	67.4	70.9	71.3	72.2	72.9	73.3	73.9	74.7	74.7	74.7	74.7	74.7	74.7	74.7	
GE 2000	55.2	64.3	65.7	68.8	72.3	73.8	74.7	75.5	75.9	76.7	77.7	77.7	77.8	77.8	77.8	77.8	77.8	
GE 1800	55.4	64.5	66.1	69.1	72.7	74.2	75.2	76.0	76.4	77.2	78.3	78.3	78.4	78.4	78.4	78.4	78.4	
GE 1500	57.4	67.1	69.1	72.5	76.8	78.4	79.3	80.3	80.6	81.6	82.9	82.9	83.2	83.2	83.3	83.3	83.3	
GE 1200	58.4	69.7	72.0	75.7	80.0	81.7	82.9	84.0	84.4	85.5	86.9	86.9	87.2	87.2	87.4	87.4	87.4	
GE 1000	58.7	70.8	73.3	77.3	81.7	83.5	84.8	86.4	86.8	88.2	89.6	89.6	90.1	90.1	90.2	90.2	90.2	
GE 900	58.9	71.4	74.0	78.1	83.1	85.0	86.3	87.9	88.4	89.8	91.3	91.3	91.7	91.7	91.8	91.8	91.8	
GE 800	58.9	72.1	74.7	79.2	84.3	86.2	87.6	89.4	90.0	91.5	92.9	92.9	93.4	93.4	93.5	93.5	93.5	
GE 700	59.2	72.6	75.4	79.9	85.3	87.2	88.7	90.4	91.0	92.6	94.0	94.0	94.4	94.4	94.6	94.6	94.6	
GE 600	59.3	72.7	75.7	80.5	86.1	87.9	89.5	91.3	91.8	93.6	95.0	95.0	95.5	95.5	95.6	95.6	95.6	
GE 500	59.3	73.2	76.4	81.6	87.6	89.5	91.3	93.0	93.7	95.6	97.0	97.0	97.5	97.5	97.6	97.6	97.6	
GE 400	59.3	73.2	76.4	81.6	87.7	89.7	91.5	93.4	94.1	96.1	97.8	97.8	98.2	98.2	98.3	98.3	98.3	
GE 300	59.3	73.2	76.4	81.6	87.7	89.7	92.0	93.9	94.6	96.6	98.2	98.2	98.7	98.7	98.9	98.9	98.9	
GE 200	59.3	73.2	76.4	81.6	87.7	89.7	92.0	93.9	94.6	96.6	98.2	98.2	98.7	98.7	98.9	98.9	98.9	
GE 100	59.3	73.2	76.4	81.6	87.7	89.7	92.0	93.9	94.6	96.6	98.2	98.2	98.7	98.7	98.9	98.9	98.9	
GE 01	59.3	73.2	76.4	81.6	87.7	89.7	92.0	93.9	94.6	96.6	98.2	98.2	98.7	98.9	99.5	100.0	100.0	

TOTAL NUMBER OF OBSERVATIONS: 846

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/WAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 76-87  
MONTH: FEB HOURS(IST): 1500-1700

CEILING		VISIBILITY IN STATUTE MILES														
IN FEET	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	37.7	41.8	43.1	43.6	44.2	44.3	45.0	45.3	45.3	45.5	45.5	45.5	45.6	45.6	45.6	45.6
GE 20000	42.8	47.5	49.1	49.6	50.4	50.5	51.2	51.4	51.4	51.7	51.7	51.7	51.8	51.8	51.8	51.8
GE 18000	43.0	47.8	49.5	50.1	50.9	51.1	51.8	52.0	52.0	52.2	52.2	52.2	52.4	52.4	52.4	52.4
GE 16000	43.4	48.1	49.9	50.5	51.3	51.4	52.1	52.4	52.4	52.6	52.6	52.6	52.7	52.7	52.7	52.7
GE 14000	44.0	48.7	50.5	51.1	51.9	52.0	52.7	53.0	53.0	53.2	53.2	53.2	53.3	53.3	53.3	53.3
GE 12000	45.4	50.5	52.2	52.8	53.7	53.8	54.6	54.8	54.8	55.1	55.1	55.1	55.2	55.2	55.2	55.2
GE 10000	46.8	52.0	53.9	54.7	55.9	56.0	56.9	57.1	57.1	57.3	57.3	57.3	57.4	57.4	57.4	57.4
GE 9000	46.8	52.0	53.9	54.7	55.9	56.0	56.9	57.1	57.1	57.3	57.3	57.3	57.4	57.4	57.4	57.4
GE 8000	48.0	53.7	55.7	56.6	58.0	58.2	59.0	59.2	59.2	59.5	59.5	59.5	59.6	59.6	59.6	59.6
GE 7000	48.0	53.7	55.7	56.7	58.2	58.3	59.1	59.3	59.3	59.6	59.6	59.6	59.7	59.7	59.7	59.7
GE 6000	48.6	54.6	57.0	58.2	59.6	59.7	60.5	60.8	60.8	61.0	61.0	61.0	61.1	61.1	61.1	61.1
GE 5000	49.1	55.3	57.7	59.1	60.5	60.6	61.8	62.2	62.2	62.4	62.4	62.4	62.5	62.5	62.5	62.5
GE 4500	49.5	55.9	58.3	60.0	61.5	61.6	62.8	63.1	63.1	63.4	63.4	63.4	63.5	63.5	63.5	63.5
GE 4000	51.3	58.0	61.0	62.8	64.3	64.4	65.7	66.1	66.1	66.5	66.5	66.5	66.9	66.9	66.9	66.9
GE 3500	51.7	58.9	61.8	63.6	65.4	65.7	67.0	67.4	67.4	67.8	67.8	67.8	68.2	68.2	68.2	68.2
GE 3000	52.6	61.0	64.4	66.4	68.7	69.1	70.7	71.0	71.2	71.6	71.7	71.7	72.1	72.1	72.1	72.1
GE 2500	53.3	61.9	65.6	68.1	70.6	71.4	72.9	73.3	73.4	74.0	74.1	74.1	74.5	74.5	74.5	74.5
GE 2000	55.2	65.2	69.1	71.9	74.6	75.5	77.1	77.5	77.7	78.4	78.5	78.5	79.0	79.0	79.0	79.0
GE 1800	55.7	66.2	70.1	72.8	75.5	76.5	78.0	78.5	78.6	79.7	79.8	79.8	80.3	80.3	80.3	80.3
GE 1500	57.3	69.3	73.8	76.7	80.0	81.0	82.5	83.1	83.2	84.5	84.8	84.8	85.3	85.3	85.5	85.5
GE 1200	57.8	71.3	76.1	79.3	82.6	83.6	85.3	86.1	86.2	87.5	87.7	87.7	88.3	88.3	88.4	88.4
GE 1000	58.3	72.0	77.0	80.1	83.6	84.5	86.5	87.2	87.6	88.9	89.2	89.2	90.0	90.0	90.1	90.1
GE 900	58.3	72.0	77.1	80.5	83.9	84.9	86.9	87.6	87.9	89.2	89.6	89.6	90.3	90.3	90.4	90.4
GE 800	58.6	72.5	78.1	81.8	85.2	86.2	88.4	89.2	89.6	91.0	91.5	91.7	92.7	92.7	92.8	92.8
GE 700	59.0	73.0	79.0	82.6	86.1	87.0	89.2	90.1	90.4	91.8	92.3	92.6	93.5	93.5	93.6	93.6
GE 600	59.0	73.2	79.1	82.7	86.4	87.4	89.6	90.4	90.8	92.2	92.7	92.9	93.9	94.0	94.2	94.2
GE 500	59.0	73.8	79.8	83.5	87.9	89.1	91.6	92.6	92.9	94.3	94.9	95.2	96.1	96.2	96.8	96.9
GE 400	59.0	73.8	79.8	83.5	87.9	89.1	91.7	92.9	93.3	94.7	95.3	95.5	96.7	96.8	97.4	97.5
GE 300	59.0	73.9	79.9	83.7	88.3	89.5	92.1	93.5	93.9	95.6	96.2	96.5	98.1	98.2	98.8	98.9
GE 200	59.0	73.9	79.9	83.7	88.3	89.5	92.1	93.6	94.0	95.7	96.3	96.6	98.5	98.7	99.3	99.4
GE 100	59.0	73.9	79.9	83.7	88.3	89.5	92.1	93.6	94.0	95.7	96.3	96.6	98.5	98.7	99.5	99.6
GE 0	59.0	73.9	79.9	83.7	88.3	89.5	92.1	93.6	94.0	95.7	96.3	96.6	98.5	98.7	99.5	100.0

TOTAL NUMBER OF OBSERVATIONS: 846

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORMS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(LST): 1800-2000

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	41.0	46.1	46.9	47.3	48.0	48.0	48.3	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5
GE 20000	43.4	48.9	49.8	50.4	51.2	51.2	51.5	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7
GE 18000	43.4	48.9	49.8	50.4	51.2	51.2	51.5	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7
GE 16000	43.5	49.1	49.9	50.5	51.3	51.3	51.7	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8
GE 14000	43.9	49.4	50.2	50.8	51.7	51.7	52.0	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1
GE 12000	45.5	51.1	51.9	52.5	53.3	53.3	53.7	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8	53.8
GE 10000	48.7	55.0	55.9	56.5	57.7	57.7	58.0	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2
GE 9000	48.7	55.0	55.9	56.5	57.7	57.7	58.0	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2
GE 8000	50.4	57.4	58.4	59.6	60.8	60.8	61.1	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2
GE 7000	50.5	57.7	58.6	59.8	61.0	61.0	61.3	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5
GE 6000	51.1	58.3	59.2	60.6	61.8	61.9	62.3	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4
GE 5000	52.2	59.5	60.6	62.2	63.4	63.5	64.2	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3	64.3
GE 4500	53.2	60.5	61.8	63.4	64.5	64.7	65.4	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.5
GE 4000	54.7	62.4	64.1	65.6	66.8	66.9	67.6	67.7	67.7	68.0	68.0	68.0	68.0	68.0	68.0	68.0
GE 3500	55.6	63.5	65.1	66.8	68.4	68.6	69.3	69.4	69.4	69.7	69.7	69.7	69.7	69.7	69.7	69.7
GE 3000	57.0	65.5	67.4	69.5	72.2	72.3	73.0	73.2	73.2	73.5	73.5	73.5	73.5	73.5	73.5	73.5
GE 2500	57.9	66.7	69.0	71.2	74.1	74.7	75.4	75.5	75.5	75.9	75.9	75.9	75.9	75.9	75.9	75.9
GE 2000	60.5	70.1	73.2	75.5	78.5	79.3	80.4	80.6	80.6	81.0	81.0	81.0	81.1	81.1	81.1	81.1
GE 1800	61.1	71.2	74.2	76.6	79.6	80.5	81.6	81.8	81.8	82.2	82.2	82.2	82.3	82.3	82.3	82.3
GE 1500	63.0	74.0	77.3	79.9	83.1	84.0	85.3	85.6	85.7	86.1	86.1	86.1	86.2	86.2	86.2	86.2
GE 1200	63.5	74.9	78.5	81.1	84.4	85.3	86.6	86.9	87.0	87.6	87.6	87.6	87.7	87.7	87.7	87.7
GE 1000	63.5	75.9	79.8	82.4	85.8	86.9	88.2	88.8	89.0	89.6	89.6	89.6	89.7	89.7	89.7	89.7
GE 900	63.5	75.9	79.9	82.5	86.1	87.1	88.4	89.1	89.6	90.2	90.2	90.2	90.3	90.3	90.3	90.3
GE 800	63.5	76.2	81.0	83.6	87.1	88.2	89.5	90.4	90.9	91.6	91.7	91.8	92.1	92.1	92.1	92.1
GE 700	63.9	77.0	81.9	84.6	88.3	89.4	90.8	91.7	92.2	92.9	93.0	93.1	93.4	93.4	93.4	93.4
GE 600	63.9	77.1	82.0	84.8	88.4	89.5	90.9	91.8	92.3	93.0	93.3	93.4	93.6	94.0	94.0	94.0
GE 500	63.9	77.5	82.7	85.7	89.5	90.5	92.0	93.0	93.5	94.2	94.6	94.7	95.2	95.5	95.7	95.7
GE 400	63.9	77.5	82.7	85.7	89.6	90.9	92.4	93.7	94.2	94.9	95.3	95.4	95.9	96.2	96.8	96.8
GE 300	63.9	77.7	82.9	86.1	90.1	91.4	93.1	94.7	95.4	96.3	96.7	96.8	97.3	97.6	98.2	98.2
GE 200	63.9	77.7	82.9	86.1	90.1	91.4	93.3	94.8	95.7	96.8	97.5	97.6	98.3	98.7	99.3	99.3
GE 100	63.9	77.7	82.9	86.1	90.1	91.4	93.3	94.8	95.7	96.8	97.5	97.6	98.3	98.7	99.3	99.6
GE 0	63.9	77.7	82.9	86.1	90.1	91.4	93.3	94.8	95.7	96.8	97.5	97.6	98.3	98.7	99.3	100.0

TOTAL NUMBER OF OBSERVATIONS: 846

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(IST): 2100-2300

CEILING IN FEET	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	42.1	44.7	45.2	45.7	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5
GE 20000	44.2	47.3	47.9	48.5	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
GE 18000	44.2	47.3	47.9	48.5	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
GE 16000	44.7	47.8	48.3	48.9	49.5	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8	49.8
GE 14000	45.2	48.2	48.8	49.4	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2
GE 12000	46.3	49.5	50.1	50.7	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
GE 10000	50.8	54.6	55.4	56.0	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9
GE 9000	51.1	54.8	55.7	56.3	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1
GE 8000	52.6	56.9	57.8	58.6	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7
GE 7000	53.1	57.4	58.5	59.5	60.5	60.5	60.5	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.8	60.8
GE 6000	54.4	58.7	59.8	60.9	61.9	61.9	61.9	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.2	62.2
GE 5000	56.5	61.2	62.4	63.5	64.5	64.5	64.8	64.9	64.9	64.9	64.9	64.9	64.9	64.9	65.0	65.0
GE 4500	57.1	61.8	63.0	64.1	65.1	65.1	65.4	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.6	65.6
GE 4000	58.6	63.7	65.1	66.3	67.5	67.5	67.7	67.8	67.8	68.1	68.1	68.1	68.1	68.1	68.2	68.2
GE 3500	59.7	64.9	66.3	67.6	69.1	69.1	69.4	69.5	69.5	69.7	69.7	69.7	69.7	69.7	69.9	69.9
GE 3000	61.5	67.4	68.8	70.3	72.3	72.3	72.6	72.7	72.7	72.9	72.9	72.9	72.9	72.9	73.0	73.0
GE 2500	62.9	69.6	71.4	73.3	76.2	76.2	76.6	76.7	76.7	77.0	77.0	77.0	77.0	77.0	77.1	77.1
GE 2000	65.4	73.2	75.2	77.1	80.1	80.1	80.7	81.1	81.2	81.6	81.6	81.6	81.6	81.6	81.7	81.7
GE 1800	65.7	73.8	75.8	77.7	80.7	80.7	81.3	81.8	81.9	82.4	82.4	82.4	82.4	82.4	82.5	82.5
GE 1500	66.8	75.5	77.5	79.4	83.2	83.2	83.9	84.8	85.0	85.8	85.8	85.8	85.8	85.8	85.9	85.9
GE 1200	67.4	76.5	78.6	80.5	84.5	84.5	85.2	86.1	86.3	87.8	87.8	87.8	87.8	87.8	87.9	87.9
GE 1000	67.7	77.7	79.8	81.9	86.1	86.1	86.9	87.8	88.1	89.6	89.8	89.8	90.0	90.0	90.1	90.1
GE 900	67.8	77.8	80.5	82.6	86.8	86.8	87.7	88.8	89.0	90.5	90.8	90.8	90.9	90.9	91.0	91.0
GE 800	67.8	78.1	81.0	83.3	87.6	87.6	88.7	89.7	90.0	91.5	91.7	91.7	91.8	91.8	92.0	92.0
GE 700	67.8	78.6	81.4	83.9	88.2	88.2	89.2	90.3	90.5	92.1	92.3	92.3	92.4	92.4	92.6	92.6
GE 600	67.8	78.7	81.7	84.3	88.5	88.5	89.8	90.9	91.3	92.8	93.0	93.0	93.1	93.1	93.3	93.3
GE 500	68.2	79.7	82.7	85.3	90.1	90.1	91.4	92.6	92.9	94.6	94.8	94.8	94.9	94.9	95.0	95.0
GE 400	68.3	79.8	83.1	86.3	91.0	91.0	92.4	93.6	94.0	95.6	95.9	95.9	96.2	96.2	96.6	96.6
GE 300	68.3	79.8	83.2	86.4	91.1	91.1	92.9	94.7	95.0	96.9	97.3	97.3	97.8	97.8	98.1	98.1
GE 200	68.3	80.0	83.5	86.6	91.4	91.4	93.1	94.9	95.6	97.8	98.1	98.2	98.8	98.8	99.3	99.5
GE 100	68.3	80.0	83.5	86.6	91.4	91.4	93.1	94.9	95.6	97.8	98.1	98.2	98.8	98.8	99.3	99.6
GE 0	68.3	80.0	83.5	86.6	91.4	91.4	93.1	94.9	95.6	97.8	98.1	98.2	98.8	98.8	99.3	100.0

TOTAL NUMBER OF OBSERVATIONS: 846

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(LST): ALL

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	41.4	44.4	45.1	45.6	46.4	46.4	46.6	46.7	46.8	46.9	46.9	46.9	47.0	47.0	47.0	47.1
GE 20000	44.3	47.7	48.4	49.0	49.9	50.0	50.2	50.3	50.3	50.4	50.5	50.5	50.5	50.5	50.5	50.6
GE 18000	44.4	47.8	48.5	49.2	50.1	50.1	50.3	50.4	50.5	50.6	50.6	50.6	50.7	50.7	50.7	50.8
GE 16000	44.5	47.9	48.6	49.3	50.2	50.3	50.5	50.6	50.6	50.7	50.8	50.8	50.8	50.8	50.8	50.9
GE 14000	45.1	48.5	49.3	49.9	50.8	50.9	51.1	51.2	51.2	51.3	51.4	51.4	51.5	51.5	51.5	51.6
GE 12000	46.1	49.7	50.4	51.1	52.0	52.1	52.3	52.4	52.5	52.5	52.6	52.6	52.7	52.7	52.7	52.8
GE 10000	48.7	52.7	53.7	54.5	55.5	55.6	55.8	55.9	56.0	56.0	56.1	56.1	56.2	56.2	56.2	56.3
GE 9000	49.0	53.1	54.1	54.9	55.9	56.0	56.2	56.3	56.3	56.4	56.5	56.5	56.5	56.6	56.6	56.6
GE 8000	50.6	55.1	56.3	57.3	58.5	58.6	58.8	58.9	58.9	59.0	59.1	59.1	59.2	59.2	59.2	59.3
GE 7000	51.0	55.7	56.9	58.0	59.2	59.3	59.5	59.7	59.7	59.8	59.9	59.9	59.9	60.0	60.0	60.1
GE 6000	51.8	56.6	57.9	59.2	60.4	60.5	60.7	60.9	60.9	61.0	61.1	61.1	61.2	61.2	61.2	61.3
GE 5000	53.6	58.7	60.1	61.5	62.9	63.0	63.5	63.7	63.7	63.8	63.9	63.9	64.0	64.0	64.0	64.1
GE 4500	54.3	59.4	60.8	62.3	63.7	63.9	64.3	64.5	64.6	64.7	64.8	64.8	64.8	64.8	64.9	64.9
GE 4000	55.9	61.5	63.1	64.7	66.3	66.4	67.0	67.2	67.2	67.5	67.6	67.6	67.7	67.7	67.7	67.8
GE 3500	56.8	62.6	64.3	66.0	67.7	67.9	68.5	68.7	68.8	69.0	69.1	69.1	69.2	69.2	69.2	69.3
GE 3000	58.3	64.8	66.7	68.6	70.7	71.0	71.6	71.9	72.0	72.2	72.4	72.4	72.4	72.5	72.5	72.6
GE 2500	59.4	66.3	68.4	70.5	72.9	73.3	74.0	74.3	74.4	74.7	74.8	74.8	74.9	74.9	75.0	75.0
GE 2000	61.2	69.0	71.3	73.5	76.2	76.9	77.8	78.4	78.5	78.9	79.0	79.0	79.2	79.2	79.2	79.3
GE 1800	61.5	69.5	71.8	74.1	76.8	77.6	78.5	79.1	79.2	79.7	79.8	79.8	80.0	80.0	80.0	80.1
GE 1500	63.1	71.9	74.5	76.8	80.0	80.7	81.8	82.6	82.7	83.3	83.5	83.5	83.7	83.7	83.8	83.9
GE 1200	64.2	73.8	76.5	79.0	82.3	83.1	84.3	85.1	85.3	86.1	86.4	86.4	86.6	86.6	86.6	86.7
GE 1000	64.9	75.2	78.2	80.7	84.2	85.1	86.5	87.5	87.7	88.6	88.9	88.9	89.3	89.3	89.4	89.5
GE 900	65.0	75.5	78.7	81.3	84.9	85.8	87.3	88.3	88.6	89.5	89.9	89.9	90.2	90.2	90.3	90.4
GE 800	65.1	76.1	79.5	82.3	85.9	86.8	88.5	89.6	90.0	91.0	91.4	91.4	91.8	91.9	91.9	92.0
GE 700	65.4	76.7	80.3	83.2	86.9	87.9	89.6	90.7	91.0	92.1	92.5	92.5	93.0	93.0	93.1	93.1
GE 600	65.5	77.0	80.7	83.8	87.6	88.5	90.3	91.4	91.8	92.9	93.4	93.4	93.9	94.0	94.0	94.1
GE 500	65.6	77.5	81.4	84.6	88.8	89.8	91.7	92.8	93.3	94.4	94.9	95.0	95.5	95.6	95.8	95.8
GE 400	65.6	77.6	81.6	85.0	89.3	90.4	92.5	93.8	94.3	95.4	96.0	96.0	96.6	96.7	96.9	97.0
GE 300	65.6	77.6	81.7	85.1	89.5	90.6	93.0	94.4	95.0	96.3	96.9	97.0	97.7	97.8	98.1	98.2
GE 200	65.6	77.7	81.7	85.2	89.6	90.7	93.1	94.7	95.4	96.8	97.5	97.6	98.4	98.6	99.1	99.4
GE 100	65.6	77.7	81.7	85.2	89.6	90.7	93.1	94.7	95.4	96.9	97.6	97.7	98.6	98.7	99.4	99.8
GE 0	65.6	77.7	81.7	85.2	89.6	90.7	93.1	94.7	95.4	96.9	97.6	97.7	98.6	98.7	99.4	100.0

TOTAL NUMBER OF OBSERVATIONS: 6768



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(LST): 0000-0200

CEILING		VISIBILITY IN STATUTE MILES															
IN FEET	1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	1	50.1	51.2	51.2	51.5	51.6	51.6	51.6	51.7	51.7	51.7	51.7	51.7	51.8	51.8	51.8	51.8
GE 20000	1	53.3	54.5	54.5	54.8	54.9	54.9	54.9	55.1	55.1	55.1	55.1	55.1	55.2	55.2	55.2	55.2
GE 18000	1	53.7	54.8	54.8	55.2	55.3	55.3	55.3	55.4	55.4	55.4	55.4	55.4	55.5	55.5	55.5	55.5
GE 16000	1	53.7	54.8	54.8	55.2	55.3	55.3	55.3	55.4	55.4	55.4	55.4	55.4	55.5	55.5	55.5	55.5
GE 14000	1	53.9	55.1	55.1	55.4	55.5	55.5	55.5	55.6	55.6	55.6	55.6	55.6	55.7	55.7	55.7	55.7
GE 12000	1	54.2	55.5	55.5	55.8	55.9	55.9	55.9	56.0	56.0	56.0	56.0	56.0	56.1	56.1	56.1	56.1
GE 10000	1	57.3	58.8	58.8	59.1	59.2	59.2	59.2	59.4	59.4	59.4	59.4	59.4	59.5	59.5	59.5	59.5
GE 9000	1	57.5	59.0	59.0	59.4	59.5	59.5	59.5	59.6	59.6	59.6	59.6	59.6	59.7	59.7	59.7	59.7
GE 8000	1	60.6	62.3	62.3	62.6	62.7	62.7	62.7	63.0	63.0	63.1	63.1	63.1	63.2	63.2	63.2	63.2
GE 7000	1	61.4	63.1	63.1	63.4	63.5	63.5	63.5	63.9	63.9	64.0	64.0	64.0	64.1	64.1	64.1	64.1
GE 6000	1	64.5	66.6	66.7	67.0	67.3	67.3	67.3	67.6	67.6	67.7	67.7	67.7	67.8	67.8	67.8	67.8
GE 5000	1	68.0	70.2	70.4	70.8	71.1	71.1	71.1	71.4	71.4	71.5	71.5	71.5	71.6	71.6	71.6	71.6
GE 4500	1	69.2	71.5	71.8	72.3	72.8	72.8	72.8	73.1	73.1	73.2	73.2	73.2	73.3	73.3	73.3	73.3
GE 4000	1	70.6	73.4	73.8	74.3	74.8	74.8	74.8	75.2	75.2	75.3	75.3	75.3	75.4	75.4	75.4	75.4
GE 3500	1	71.6	74.7	75.3	75.8	76.3	76.3	76.3	76.7	76.7	76.8	76.8	76.8	76.9	76.9	76.9	76.9
GE 3000	1	73.5	77.1	77.7	78.3	78.9	78.9	78.9	79.2	79.2	79.4	79.4	79.4	79.5	79.5	79.5	79.5
GE 2500	1	75.6	79.4	80.0	80.8	81.5	81.5	81.6	81.9	81.9	82.0	82.0	82.0	82.2	82.2	82.2	82.2
GE 2000	1	76.9	81.4	82.0	83.0	84.2	84.2	84.3	84.6	84.6	84.7	84.7	84.7	84.8	84.8	84.8	84.8
GE 1800	1	77.0	81.5	82.5	83.4	84.7	84.7	84.8	85.2	85.2	85.3	85.3	85.3	85.4	85.4	85.4	85.4
GE 1500	1	77.6	82.5	83.4	84.5	85.8	86.0	86.1	86.5	86.5	86.6	86.6	86.6	86.7	86.7	86.7	86.7
GE 1200	1	79.2	84.5	85.7	86.9	88.4	88.7	89.4	90.0	90.0	90.1	90.1	90.1	90.2	90.2	90.2	90.2
GE 1000	1	79.6	85.4	86.7	88.0	89.5	89.8	90.4	91.1	91.1	91.2	91.2	91.2	91.3	91.3	91.3	91.3
GE 900	1	80.2	86.2	87.6	88.9	90.4	90.6	91.6	92.3	92.3	92.4	92.4	92.4	92.5	92.5	92.5	92.5
GE 800	1	80.3	86.6	88.0	89.2	90.9	91.2	92.2	92.8	93.0	93.1	93.1	93.1	93.2	93.2	93.2	93.2
GE 700	1	80.4	86.7	88.3	89.6	91.4	91.7	92.7	93.8	94.1	94.2	94.4	94.4	94.5	94.5	94.5	94.5
GE 600	1	80.4	87.2	88.8	90.2	92.2	92.5	93.4	94.9	95.3	95.4	95.6	95.6	95.7	95.7	95.7	95.7
GE 500	1	80.8	87.5	89.1	90.6	92.8	93.1	94.1	95.6	96.0	96.1	96.6	96.6	96.8	96.8	96.8	96.8
GE 400	1	80.8	87.5	89.1	90.6	92.8	93.1	94.4	95.9	96.3	96.5	96.9	96.9	97.1	97.1	97.1	97.1
GE 300	1	80.8	87.5	89.1	90.6	92.8	93.1	94.4	95.9	96.3	96.5	96.9	96.9	97.1	97.1	97.1	97.1
GE 200	1	80.8	87.5	89.1	90.6	92.8	93.1	94.7	96.6	97.2	97.3	97.8	97.8	98.6	98.6	98.6	98.6
GE 100	1	80.8	87.5	89.1	90.6	92.8	93.1	94.7	96.6	97.2	97.3	97.8	97.8	98.6	99.0	99.1	99.5
GE 0	1	80.8	87.5	89.1	90.6	92.8	93.1	94.7	96.6	97.2	97.3	97.8	97.8	98.6	99.0	99.1	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(IST): 0500-0500

CEILING IN FEET	VISIBILITY IN STATUTE MILES																	
	GE 1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0	
NO CEIL	47.6	49.2	49.5	49.6	50.0	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.2	50.3	50.3	50.3	
GE 20000	50.5	52.2	52.4	52.5	52.9	53.1	53.1	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.3	53.3	53.3	
GE 18000	50.5	52.2	52.4	52.5	52.9	53.1	53.1	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.3	53.3	53.3	
GE 16000	50.6	52.3	52.5	52.6	53.0	53.2	53.2	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.4	53.4	53.4	
GE 14000	51.5	53.1	53.3	53.4	53.9	54.1	54.1	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.3	54.3	54.3	
GE 12000	52.0	53.9	54.1	54.2	54.6	54.8	54.8	54.9	54.9	54.9	54.9	54.9	54.9	54.9	55.1	55.1	55.1	
GE 10000	54.5	56.7	56.9	57.0	57.4	57.6	57.6	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.8	57.8	57.8	
GE 9000	54.6	56.8	57.0	57.1	57.5	57.7	57.7	57.8	57.8	57.8	57.8	57.8	57.8	57.8	58.0	58.0	58.0	
GE 8000	58.6	60.9	61.1	61.2	61.6	61.8	61.8	61.9	61.9	61.9	61.9	61.9	61.9	61.9	62.0	62.0	62.0	
GE 7000	59.0	61.4	61.6	61.7	62.2	62.4	62.4	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.6	62.6	62.6	
GE 6000	60.9	63.8	64.1	64.5	65.2	65.4	65.4	65.5	65.5	65.5	65.5	65.5	65.5	65.5	65.6	65.6	65.6	
GE 5000	63.9	66.8	67.1	67.5	68.3	68.5	68.5	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.7	68.7	68.7	
GE 4500	64.6	67.7	68.1	68.5	69.4	69.8	69.8	69.9	69.9	69.9	69.9	69.9	69.9	69.9	70.0	70.0	70.0	
GE 4000	67.0	70.3	70.8	71.2	72.0	72.6	72.7	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.9	72.9	72.9	
GE 3500	67.7	71.2	71.6	72.0	73.1	73.7	73.8	73.9	73.9	73.9	73.9	73.9	73.9	73.9	74.0	74.0	74.0	
GE 3000	69.9	73.8	74.4	74.9	76.3	76.9	77.1	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.4	77.4	77.4	
GE 2500	71.4	75.9	76.7	77.2	78.7	79.4	79.6	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.9	79.9	79.9	
GE 2000	73.2	78.0	79.2	79.8	81.4	82.3	82.5	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.9	82.9	82.9	
GE 1800	73.5	78.3	79.9	80.4	82.0	82.9	83.1	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.5	83.5	83.5	
GE 1500	74.5	79.5	81.2	81.8	83.7	84.6	84.8	85.3	85.3	85.4	85.4	85.4	85.4	85.4	85.5	85.5	85.5	
GE 1200	75.7	81.1	82.9	83.9	86.3	87.3	87.5	88.2	88.2	88.3	88.3	88.3	88.3	88.3	88.4	88.4	88.4	
GE 1000	76.1	82.0	84.0	84.9	87.6	88.6	88.8	89.5	89.5	89.6	89.7	89.7	89.7	89.7	89.8	89.8	89.8	
GE 900	76.5	83.0	85.3	86.2	89.0	90.3	90.6	91.4	91.5	91.6	91.7	91.7	91.7	91.7	91.8	91.8	91.8	
GE 800	76.6	83.1	85.4	86.3	89.1	90.4	90.9	91.7	91.8	91.9	92.0	92.0	92.0	92.0	92.2	92.2	92.2	
GE 700	76.9	83.5	85.8	86.8	89.6	91.0	91.5	92.5	92.6	92.9	93.1	93.1	93.1	93.1	93.2	93.2	93.2	
GE 600	77.1	84.3	86.6	87.5	90.4	91.8	92.4	93.4	93.5	93.9	94.1	94.1	94.1	94.1	94.2	94.2	94.2	
GE 500	77.1	84.4	86.8	87.7	90.6	92.0	93.1	94.2	94.3	94.7	94.9	94.9	95.2	95.3	95.3	95.3	95.3	
GE 400	77.1	84.5	86.9	88.0	91.0	92.5	94.1	95.5	95.6	96.0	96.5	96.5	96.7	96.8	96.8	96.8	96.8	
GE 300	77.1	84.6	87.0	88.2	91.2	92.9	94.8	96.3	96.5	96.9	97.3	97.3	97.5	97.6	97.6	97.6	97.6	
GE 200	77.1	84.6	87.0	88.2	91.2	92.9	94.9	96.8	97.2	98.0	98.4	98.4	98.9	99.0	99.0	99.0	99.0	
GE 100	77.1	84.6	87.0	88.2	91.2	92.9	94.9	96.8	97.2	98.0	98.4	98.4	98.9	99.0	99.4	99.4	99.4	
GE 0	77.1	84.6	87.0	88.2	91.2	92.9	94.9	96.8	97.2	98.0	98.4	98.4	98.9	99.0	99.4	100.0	100.0	

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(LST): 0600-0800

CEILING IN FEET	VISIBILITY IN STATUTE MILES																	
	1 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0		
NO CEIL	43.8	46.5	46.9	47.1	48.3	48.3	48.6	49.1	49.1	49.4	49.4	49.4	49.4	49.4	49.4	49.5		
GE 20000	47.8	50.8	51.2	51.4	52.7	52.7	53.0	53.5	53.5	53.8	53.8	53.8	53.8	53.8	53.8	53.9		
GE 18000	48.2	51.1	51.5	51.7	53.0	53.0	53.3	53.9	53.9	54.1	54.1	54.1	54.1	54.1	54.1	54.2		
GE 16000	48.2	51.1	51.5	51.7	53.0	53.0	53.3	53.9	53.9	54.1	54.1	54.1	54.1	54.1	54.1	54.2		
GE 14000	48.3	51.2	51.6	51.8	53.1	53.1	53.4	54.0	54.0	54.2	54.2	54.2	54.2	54.2	54.2	54.3		
GE 12000	48.8	51.7	52.2	52.4	53.7	53.7	54.0	54.5	54.5	54.7	54.7	54.7	54.7	54.7	54.7	54.8		
GE 10000	50.8	53.9	54.3	54.5	55.8	55.8	56.1	56.7	56.7	57.0	57.0	57.0	57.0	57.0	57.0	57.1		
GE 9000	51.1	54.5	54.9	55.2	56.5	56.5	56.8	57.3	57.3	57.6	57.6	57.6	57.6	57.6	57.6	57.7		
GE 8000	53.3	57.2	57.7	58.0	59.2	59.2	59.6	60.1	60.1	60.4	60.4	60.4	60.4	60.4	60.4	60.5		
GE 7000	53.9	58.1	58.6	58.8	60.2	60.2	60.5	61.1	61.1	61.5	61.5	61.5	61.5	61.5	61.5	61.6		
GE 6000	55.8	61.0	61.6	61.8	63.2	63.2	63.5	64.1	64.1	64.5	64.5	64.5	64.5	64.5	64.5	64.6		
GE 5000	58.5	64.3	65.1	65.4	66.9	66.9	67.2	67.7	67.7	68.2	68.2	68.2	68.2	68.2	68.2	68.3		
GE 4500	59.1	65.2	65.9	66.2	67.8	67.8	68.1	68.5	69.0	69.0	69.5	69.5	69.5	69.5	69.5	69.6		
GE 4000	60.9	67.6	68.5	68.9	70.8	71.0	71.4	71.9	71.9	72.4	72.4	72.4	72.4	72.4	72.4	72.5		
GE 3500	61.5	68.5	69.6	70.0	71.8	72.0	72.5	73.0	73.0	73.4	73.4	73.4	73.4	73.4	73.4	73.5		
GE 3000	62.4	70.0	71.2	71.7	73.5	73.8	74.2	74.7	74.7	75.2	75.2	75.3	75.3	75.3	75.3	75.4		
GE 2500	64.0	71.8	73.2	73.9	75.9	76.1	76.8	77.4	77.6	78.2	78.2	78.3	78.3	78.3	78.3	78.4		
GE 2000	66.1	74.7	76.5	77.2	79.4	79.6	80.4	81.2	81.4	81.9	81.9	82.0	82.0	82.0	82.0	82.2		
GE 1800	66.3	74.9	76.7	77.4	79.7	79.9	80.8	81.5	81.7	82.3	82.3	82.4	82.4	82.4	82.4	82.5		
GE 1500	67.4	76.3	78.4	79.1	81.6	81.8	82.8	83.7	84.0	84.5	84.5	84.6	84.6	84.6	84.6	84.7		
GE 1200	67.8	77.2	79.4	80.1	82.9	83.1	84.3	85.2	85.6	86.1	86.1	86.2	86.2	86.2	86.2	86.3		
GE 1000	69.4	78.9	81.2	81.9	84.9	85.2	86.5	87.3	87.7	88.4	88.5	88.6	88.6	88.6	88.6	88.7		
GE 900	69.4	79.1	81.4	82.4	85.6	86.1	87.5	88.6	89.0	89.7	89.9	90.0	90.0	90.0	90.0	90.1		
GE 800	69.4	79.5	81.8	82.9	86.1	86.8	88.2	89.2	89.7	90.6	90.9	91.0	91.0	91.0	91.0	91.1		
GE 700	69.4	79.6	81.9	83.1	86.3	87.0	88.4	89.5	89.9	90.9	91.2	91.3	91.3	91.3	91.3	91.4		
GE 600	69.5	79.9	82.4	83.7	87.3	88.0	89.4	90.9	91.3	92.5	92.9	93.0	93.0	93.0	93.0	93.1		
GE 500	69.5	80.3	82.8	84.4	88.1	88.7	90.2	91.7	92.2	93.4	93.9	94.0	94.2	94.2	94.2	94.3		
GE 400	69.6	80.8	83.2	84.8	88.8	89.7	91.4	92.9	93.4	94.8	95.5	95.6	95.9	95.9	96.0	96.1		
GE 300	69.7	81.0	83.4	85.2	89.2	90.2	92.2	93.7	94.3	95.8	96.8	96.9	97.2	97.2	97.3	97.4		
GE 200	69.7	81.0	83.4	85.2	89.2	90.2	92.4	94.0	94.7	96.8	97.7	97.8	98.5	98.5	98.7	98.8		
GE 100	69.7	81.0	83.4	85.2	89.2	90.2	92.4	94.0	94.7	96.8	97.7	97.8	98.6	98.6	99.4	99.5		
GE 01	69.7	81.0	83.4	85.2	89.2	90.2	92.4	94.0	94.7	96.8	97.7	97.8	98.6	98.7	99.5	100.0		

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(IST): 0900-1100

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	43.7	46.9	48.6	49.1	49.5	49.5	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6
GE 20000	47.7	51.2	53.0	53.7	54.0	54.0	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1
GE 18000	47.8	51.3	53.1	53.8	54.1	54.1	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
GE 16000	48.0	51.4	53.2	53.9	54.2	54.2	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3
GE 14000	48.4	51.9	53.8	54.5	54.8	54.8	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9
GE 12000	48.9	52.7	54.5	55.3	55.6	55.6	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7
GE 10000	50.6	54.5	56.5	57.2	57.5	57.5	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8
GE 9000	50.6	54.6	56.6	57.3	57.6	57.6	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0
GE 8000	51.7	55.9	58.1	59.1	59.7	59.7	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2
GE 7000	53.1	57.5	59.7	60.8	61.4	61.4	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
GE 6000	55.1	59.8	61.9	63.3	64.3	64.3	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1
GE 5000	56.7	62.3	64.4	66.0	67.1	67.1	67.8	68.1	68.1	68.1	68.2	68.2	68.2	68.3	68.3	68.4
GE 4500	57.2	63.2	65.7	67.4	68.6	68.7	69.5	69.7	69.7	69.7	69.8	69.8	69.8	69.9	69.9	70.0
GE 4000	58.2	64.7	67.2	69.0	70.4	70.5	71.3	71.6	71.6	71.6	71.9	71.9	71.9	72.0	72.0	72.2
GE 3500	58.5	65.2	67.6	69.5	70.9	71.0	71.7	72.0	72.0	72.0	72.4	72.4	72.4	72.5	72.5	72.6
GE 3000	59.4	66.2	68.8	70.8	72.2	72.3	73.1	73.7	73.7	73.7	74.0	74.1	74.1	74.2	74.2	74.3
GE 2500	59.8	67.2	70.1	72.0	73.4	73.5	74.6	75.2	75.2	75.2	75.5	75.6	75.6	75.7	75.7	75.8
GE 2000	61.2	69.7	72.9	74.8	76.3	76.6	78.0	78.5	78.6	78.6	79.0	79.1	79.1	79.2	79.2	79.4
GE 1800	61.2	69.7	72.9	74.8	76.5	76.9	78.3	78.8	78.9	78.9	79.4	79.5	79.5	79.6	79.7	79.7
GE 1500	62.5	71.4	74.6	76.6	78.5	78.9	80.5	81.1	81.2	81.2	81.7	81.9	81.9	82.0	82.0	82.2
GE 1200	63.8	74.1	77.4	79.4	81.7	82.5	84.5	85.2	85.3	85.3	85.8	86.0	86.0	86.2	86.2	86.3
GE 1000	64.9	75.6	79.2	81.3	84.0	84.7	87.0	87.8	88.0	88.0	88.6	88.8	88.8	89.0	89.0	89.1
GE 900	65.3	76.3	80.2	82.3	84.9	85.7	88.0	88.8	88.8	88.9	89.6	89.6	89.6	90.0	90.2	90.3
GE 800	65.3	76.6	80.6	82.9	85.8	86.7	88.9	89.9	89.9	90.0	90.6	91.1	91.1	91.3	91.3	91.4
GE 700	65.3	76.8	80.9	83.2	86.5	87.3	89.7	90.8	91.0	91.0	91.6	92.0	92.0	92.3	92.3	92.4
GE 600	65.4	77.2	81.4	83.8	87.4	88.3	90.8	91.9	92.3	92.3	93.2	93.7	93.7	94.1	94.1	94.2
GE 500	65.5	77.5	81.9	84.4	88.1	88.9	91.6	92.8	93.1	93.1	94.2	94.8	94.8	95.7	95.7	95.8
GE 400	65.5	77.5	81.9	84.5	88.4	89.2	92.3	93.5	93.9	93.9	94.9	95.6	95.6	96.5	96.5	96.9
GE 300	65.5	77.5	81.9	84.5	88.5	89.4	92.7	94.0	94.3	94.3	95.4	96.2	96.2	97.1	97.1	97.5
GE 200	65.5	77.5	81.9	84.5	88.5	89.4	92.9	94.2	94.7	94.7	96.1	97.4	97.4	98.4	98.4	99.2
GE 100	65.5	77.5	81.9	84.5	88.5	89.4	92.9	94.2	94.7	94.7	96.1	97.4	97.4	98.4	98.9	99.7
GE 01	65.5	77.5	81.9	84.5	88.5	89.4	92.9	94.2	94.7	94.7	96.1	97.4	97.4	98.4	98.9	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(IST): 1200-1400

CEILING		VISIBILITY IN STATUTE MILES															
IN FEET	GE 10	GE 6	GE 5	GE 4	GE 3	2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0	
NO CEIL	44.8	47.2	48.8	48.8	49.0	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1	
GE 20000	49.5	52.6	54.2	54.2	54.4	54.5	54.5	54.5	54.5	54.6	54.6	54.6	54.6	54.6	54.6	54.6	
GE 18000	49.5	52.7	54.3	54.3	54.5	54.6	54.6	54.6	54.6	54.7	54.7	54.7	54.7	54.7	54.7	54.7	
GE 16000	49.6	52.8	54.4	54.4	54.6	54.7	54.7	54.7	54.7	54.8	54.8	54.8	54.8	54.8	54.8	54.8	
GE 14000	50.0	53.5	55.2	55.2	55.4	55.5	55.5	55.5	55.5	55.6	55.6	55.6	55.6	55.6	55.6	55.6	
GE 12000	51.5	55.2	56.8	56.8	57.0	57.1	57.1	57.1	57.1	57.2	57.2	57.2	57.2	57.2	57.2	57.2	
GE 10000	53.0	56.7	58.3	58.3	58.6	58.7	58.7	58.7	58.7	58.9	58.9	58.9	58.9	58.9	58.9	58.9	
GE 9000	53.3	57.0	58.6	58.6	58.9	59.0	59.0	59.1	59.1	59.4	59.4	59.4	59.4	59.4	59.4	59.4	
GE 8000	54.7	58.5	60.2	60.2	60.6	60.8	60.9	61.1	61.1	61.3	61.3	61.3	61.3	61.3	61.3	61.3	
GE 7000	55.2	58.9	60.8	60.8	61.2	61.4	61.5	61.7	61.7	61.9	61.9	61.9	61.9	61.9	61.9	61.9	
GE 6000	56.5	60.5	62.4	62.5	62.9	63.1	63.3	63.5	63.5	63.9	63.9	63.9	63.9	63.9	63.9	63.9	
GE 5000	57.2	61.8	63.7	64.0	64.5	64.8	65.1	65.3	65.3	65.6	65.7	65.8	65.8	65.9	65.9	65.9	
GE 4500	57.3	62.6	64.4	64.7	65.3	65.6	65.8	66.0	66.0	66.3	66.5	66.6	66.6	66.7	66.7	66.7	
GE 4000	59.1	64.6	66.6	67.1	68.0	68.3	68.7	69.0	69.0	69.6	69.7	69.8	69.8	69.9	69.9	69.9	
GE 3500	60.1	66.1	68.1	68.6	69.5	69.8	70.2	70.5	70.5	71.1	71.2	71.3	71.3	71.4	71.4	71.4	
GE 3000	62.2	68.6	70.8	71.4	72.4	72.7	73.4	73.8	73.8	74.3	74.4	74.5	74.8	74.9	74.9	74.9	
GE 2500	63.2	69.8	72.3	72.9	73.9	74.2	75.6	75.9	75.9	76.5	76.6	76.7	77.0	77.1	77.1	77.1	
GE 2000	65.2	73.0	75.5	76.2	77.2	77.5	79.0	79.4	79.4	80.0	80.1	80.2	80.6	80.8	80.8	80.8	
GE 1800	65.4	73.3	75.8	76.6	77.5	77.8	79.4	79.7	79.7	80.3	80.4	80.5	81.0	81.1	81.1	81.1	
GE 1500	67.5	76.2	78.9	79.9	81.1	81.4	82.9	83.3	83.4	84.1	84.2	84.3	84.9	85.1	85.1	85.1	
GE 1200	68.6	78.2	81.2	82.4	83.7	84.0	85.7	86.1	86.2	86.9	87.0	87.1	87.8	88.0	88.0	88.0	
GE 1000	69.4	79.5	82.5	83.8	85.5	85.8	87.7	88.2	88.3	89.0	89.2	89.4	90.3	90.4	90.4	90.4	
GE 900	69.7	80.3	83.5	85.3	87.2	87.5	89.6	90.0	90.1	90.9	91.1	91.2	92.2	92.3	92.3	92.3	
GE 800	69.7	80.5	83.9	85.6	87.6	88.1	90.1	90.5	90.6	91.4	91.6	91.7	92.7	92.8	92.8	92.8	
GE 700	69.8	81.1	84.4	86.2	88.5	88.9	91.4	91.8	91.9	92.7	92.9	93.0	94.0	94.1	94.1	94.1	
GE 600	69.9	81.4	84.7	86.6	88.8	89.2	91.7	92.2	92.3	93.0	93.2	93.3	94.4	94.5	94.5	94.5	
GE 500	69.9	81.8	85.2	87.0	89.5	90.0	92.5	92.9	93.0	93.8	94.0	94.1	95.4	95.5	95.5	95.8	
GE 400	70.0	81.9	85.5	87.5	90.1	90.8	93.2	93.9	94.0	94.8	95.1	95.2	96.5	96.6	96.9	97.2	
GE 300	70.0	81.9	85.5	87.6	90.4	91.1	93.5	94.3	94.4	95.4	96.6	96.7	98.1	98.2	98.6	98.9	
GE 200	70.0	81.9	85.5	87.6	90.8	91.4	93.9	94.6	94.7	95.9	97.1	97.3	98.8	98.9	99.5	99.8	
GE 100	70.0	81.9	85.5	87.6	90.8	91.4	93.9	94.6	94.7	95.9	97.1	97.3	98.8	98.9	99.6	99.9	
GE 0	70.0	81.9	85.5	87.6	90.8	91.4	93.9	94.6	94.7	95.9	97.1	97.3	98.8	99.0	99.7	100.0	

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(LST): 1500-1700

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	44.3	45.7	46.1	46.2	46.3	46.5	46.5	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6
GE 20000	48.1	50.1	50.9	51.1	51.2	51.3	51.3	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4
GE 18000	48.5	50.5	51.3	51.5	51.6	51.7	51.7	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8
GE 16000	48.5	50.5	51.3	51.5	51.6	51.7	51.7	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8
GE 14000	49.6	52.2	52.9	53.1	53.2	53.3	53.3	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4
GE 12000	50.4	53.0	53.8	54.0	54.1	54.2	54.2	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3
GE 10000	52.5	55.5	56.2	56.6	56.7	56.8	56.8	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1
GE 9000	52.7	55.7	56.5	56.8	56.9	57.0	57.0	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3
GE 8000	54.9	58.4	59.1	59.5	59.6	59.7	59.7	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
GE 7000	55.7	59.5	60.2	60.5	60.8	60.9	60.9	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2
GE 6000	56.9	61.0	61.7	62.2	62.4	62.5	62.7	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
GE 5000	58.2	62.8	63.8	64.5	64.7	64.8	65.1	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4
GE 4500	58.3	63.1	64.1	64.9	65.2	65.3	65.7	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
GE 4000	60.2	65.3	66.2	67.3	67.5	67.6	68.1	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5
GE 3500	62.6	67.7	68.7	69.8	70.0	70.1	70.5	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
GE 3000	65.3	71.4	72.4	73.4	74.0	74.1	74.6	75.2	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
GE 2500	66.3	72.8	74.3	75.4	76.0	76.2	77.0	78.0	78.1	78.3	78.3	78.3	78.3	78.3	78.3	78.3
GE 2000	68.3	75.7	77.2	78.3	79.1	79.6	80.3	81.3	81.4	81.6	81.6	81.6	81.6	81.6	81.6	81.6
GE 1800	68.9	76.7	78.2	79.2	80.1	80.5	81.3	82.3	82.4	82.6	82.6	82.6	82.6	82.6	82.6	82.6
GE 1500	70.9	80.0	81.5	82.9	84.0	84.4	85.2	86.5	86.6	86.8	86.8	86.8	86.8	86.8	86.8	86.8
GE 1200	71.8	81.8	83.7	85.5	86.6	87.0	87.7	89.8	89.1	89.4	89.4	89.4	89.4	89.4	89.4	89.4
GE 1000	72.5	82.8	84.6	86.5	87.8	88.4	89.6	91.0	91.1	91.6	91.8	91.8	92.2	92.2	92.2	92.2
GE 900	72.6	83.1	85.3	87.2	88.7	89.2	90.4	91.8	91.9	92.5	92.7	92.7	93.0	93.0	93.0	93.0
GE 800	72.6	83.3	85.7	87.6	89.1	89.7	90.9	92.4	92.5	93.0	93.3	93.3	93.7	93.7	93.7	93.7
GE 700	72.6	83.5	86.0	88.0	89.6	90.2	91.5	93.0	93.1	93.7	94.0	94.0	94.4	94.4	94.4	94.4
GE 600	72.7	83.9	86.6	88.5	90.2	90.9	92.3	93.9	94.0	94.6	94.9	94.9	95.4	95.4	95.4	95.4
GE 500	72.7	84.3	87.0	88.9	90.8	91.4	93.0	94.7	94.8	95.6	96.1	96.1	96.7	96.7	96.7	96.8
GE 400	72.7	84.3	87.0	89.1	91.2	91.9	93.7	95.4	95.5	96.2	96.9	96.9	97.4	97.4	97.4	97.8
GE 300	72.7	84.3	87.0	89.1	91.3	92.2	93.9	95.8	96.0	97.1	97.8	97.8	98.5	98.5	98.8	98.9
GE 200	72.7	84.3	87.0	89.1	91.5	92.4	94.2	96.1	96.3	97.6	98.4	98.5	99.2	99.2	99.6	99.7
GE 100	72.7	84.3	87.0	89.1	91.5	92.4	94.2	96.1	96.3	97.6	98.4	98.5	99.2	99.6	99.9	100.0
GE 0	72.7	84.3	87.0	89.1	91.5	92.4	94.2	96.1	96.3	97.6	98.4	98.5	99.2	99.6	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(IST): 1800-2000

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	47.0	48.0	48.3	48.6	48.8	48.9	48.9	48.9	48.9	49.0	49.0	49.0	49.0	49.0	49.0	49.0
GE 20000	50.9	52.5	52.8	53.2	53.4	53.5	53.5	53.5	53.5	53.7	53.7	53.7	53.7	53.7	53.7	53.7
GE 18000	51.0	52.8	53.1	53.5	53.8	53.9	53.9	53.9	53.9	54.0	54.0	54.0	54.0	54.0	54.0	54.0
GE 16000	51.2	53.0	53.3	53.8	54.0	54.1	54.1	54.1	54.1	54.2	54.2	54.2	54.2	54.2	54.2	54.2
GE 14000	51.7	53.7	54.0	54.4	54.6	54.7	54.7	54.7	54.7	54.8	54.8	54.8	54.8	54.8	54.8	54.8
GE 12000	52.3	54.2	54.5	54.9	55.2	55.3	55.3	55.3	55.3	55.4	55.4	55.4	55.4	55.4	55.4	55.4
GE 10000	54.5	57.1	57.5	58.1	58.3	58.4	58.4	58.4	58.4	58.5	58.5	58.5	58.5	58.5	58.5	58.5
GE 9000	55.2	58.1	58.5	59.0	59.2	59.4	59.4	59.4	59.4	59.5	59.5	59.5	59.5	59.5	59.5	59.5
GE 8000	58.5	61.4	61.8	62.4	62.6	62.7	62.7	62.7	62.7	62.8	62.8	62.8	62.8	62.8	62.8	62.8
GE 7000	59.0	62.0	62.5	63.0	63.2	63.3	63.3	63.3	63.3	63.4	63.4	63.4	63.4	63.4	63.4	63.4
GE 6000	60.4	63.9	64.5	65.2	65.4	65.5	65.5	65.5	65.5	65.6	65.6	65.6	65.6	65.6	65.6	65.6
GE 5000	62.0	65.7	66.3	67.0	67.2	67.3	67.3	67.3	67.3	67.4	67.4	67.4	67.4	67.4	67.4	67.4
GE 4500	62.3	66.1	66.8	67.4	67.7	67.8	67.8	67.8	67.8	68.1	68.1	68.1	68.1	68.1	68.1	68.1
GE 4000	64.2	68.3	69.0	69.9	70.2	70.4	70.4	70.4	70.4	70.6	70.6	70.6	70.6	70.6	70.6	70.6
GE 3500	66.0	70.4	71.2	72.0	72.4	72.6	72.6	72.6	72.6	73.1	73.1	73.1	73.1	73.1	73.1	73.1
GE 3000	68.1	72.9	73.9	74.8	75.6	75.8	75.9	76.0	76.0	76.2	76.6	76.6	76.6	76.6	76.6	76.6
GE 2500	70.2	75.6	76.6	77.8	78.8	79.0	79.1	79.2	79.2	79.5	79.8	79.8	79.8	79.8	79.8	79.8
GE 2000	72.3	78.4	79.4	81.0	82.3	82.6	82.7	82.8	82.8	83.1	83.4	83.4	83.4	83.4	83.4	83.4
GE 1800	72.4	78.6	79.6	81.3	82.6	82.9	83.0	83.1	83.1	83.4	83.8	83.8	83.8	83.8	83.8	83.8
GE 1500	72.9	79.8	81.1	82.9	84.5	84.9	85.1	85.2	85.2	85.6	85.9	85.9	85.9	85.9	85.9	85.9
GE 1200	74.1	81.7	83.0	85.2	87.5	88.4	88.9	89.2	89.2	89.7	90.1	90.1	90.1	90.1	90.1	90.1
GE 1000	74.9	82.6	84.1	86.3	88.9	89.9	90.6	91.0	91.0	91.6	92.0	92.0	92.0	92.0	92.0	92.0
GE 900	74.9	82.6	84.2	86.6	89.1	90.1	90.9	91.2	91.2	91.8	92.3	92.3	92.3	92.3	92.3	92.3
GE 800	74.9	82.6	84.2	86.6	89.4	90.4	91.4	91.9	91.9	92.6	93.0	93.0	93.0	93.0	93.0	93.0
GE 700	74.9	82.7	84.4	86.8	89.7	90.8	91.7	92.3	92.4	93.1	93.5	93.5	93.5	93.5	93.5	93.5
GE 600	75.1	83.0	84.8	87.3	90.2	91.3	92.3	92.8	92.9	93.9	94.3	94.3	94.3	94.3	94.3	94.3
GE 500	75.1	83.0	84.8	87.4	90.5	91.6	93.0	93.7	94.2	95.6	96.2	96.2	96.2	96.3	96.3	96.3
GE 400	75.1	83.0	84.8	87.6	91.0	92.2	93.5	94.5	95.3	96.9	97.5	97.5	97.6	97.7	97.7	97.7
GE 300	75.1	83.0	84.8	87.6	91.2	92.4	93.9	95.2	96.0	97.8	98.6	98.6	98.7	98.8	98.8	98.8
GE 200	75.1	83.0	84.8	87.6	91.2	92.4	94.1	95.4	96.2	98.1	99.0	99.0	99.5	99.6	99.6	99.6
GE 100	75.1	83.0	84.8	87.6	91.2	92.4	94.1	95.4	96.2	98.1	99.0	99.0	99.6	99.8	99.8	100.0
GE 0	75.1	83.0	84.8	87.6	91.2	92.4	94.1	95.4	96.2	98.1	99.0	99.0	99.6	99.8	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(LST): 2100-2300

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	51.2	52.9	52.9	53.0	53.3	53.3	53.4	53.4	53.4	53.7	53.7	53.7	53.7	53.7	53.7	53.7
GE 20000	54.8	56.8	56.8	56.9	57.2	57.2	57.3	57.3	57.3	57.5	57.5	57.5	57.5	57.5	57.5	57.5
GE 18000	54.8	56.8	56.8	56.9	57.2	57.2	57.3	57.3	57.3	57.5	57.5	57.5	57.5	57.5	57.5	57.5
GE 16000	54.8	56.8	56.8	56.9	57.2	57.2	57.3	57.3	57.3	57.5	57.5	57.5	57.5	57.5	57.5	57.5
GE 14000	55.3	57.2	57.2	57.3	57.6	57.6	57.7	57.7	57.7	58.0	58.0	58.0	58.0	58.0	58.0	58.0
GE 12000	55.6	57.5	57.5	57.6	58.0	58.0	58.1	58.1	58.1	58.3	58.3	58.3	58.3	58.3	58.3	58.3
GE 10000	58.1	60.1	60.1	60.2	60.5	60.5	60.6	60.6	60.6	60.9	60.9	60.9	60.9	60.9	60.9	60.9
GE 9000	58.4	60.6	60.8	60.9	61.2	61.2	61.3	61.3	61.3	61.5	61.5	61.5	61.5	61.5	61.5	61.5
GE 8000	61.2	63.4	63.5	63.7	64.2	64.2	64.3	64.4	64.4	64.6	64.6	64.6	64.6	64.6	64.6	64.6
GE 7000	62.4	64.6	64.7	64.8	65.4	65.4	65.5	65.6	65.6	65.8	65.8	65.8	65.8	65.8	65.8	65.8
GE 6000	64.5	66.9	67.0	67.1	67.7	67.7	67.8	68.0	68.0	68.2	68.2	68.2	68.2	68.2	68.2	68.2
GE 5000	66.9	69.5	70.1	70.2	70.9	70.9	71.0	71.1	71.1	71.3	71.3	71.3	71.3	71.3	71.3	71.3
GE 4500	67.8	70.4	71.1	71.2	71.8	71.8	71.9	72.0	72.0	72.3	72.3	72.3	72.3	72.3	72.3	72.3
GE 4000	69.8	72.9	73.5	73.9	74.7	74.7	74.9	75.1	75.1	75.3	75.3	75.3	75.3	75.3	75.3	75.3
GE 3500	70.9	74.0	74.7	75.1	75.9	75.9	76.1	76.2	76.2	76.5	76.5	76.5	76.5	76.5	76.5	76.5
GE 3000	72.5	75.7	76.6	76.9	78.1	78.1	78.3	78.4	78.4	78.6	78.6	78.6	78.6	78.6	78.6	78.6
GE 2500	74.1	78.1	79.0	79.7	80.9	80.9	81.1	81.4	81.4	81.6	81.6	81.6	81.6	81.6	81.6	81.6
GE 2000	75.3	79.8	81.1	81.8	83.2	83.3	83.5	83.9	83.9	84.2	84.2	84.2	84.2	84.2	84.2	84.2
GE 1800	75.6	80.1	81.4	82.3	83.8	83.9	84.1	84.4	84.4	84.7	84.7	84.7	84.7	84.7	84.7	84.7
GE 1500	76.7	81.7	83.1	84.2	86.0	86.2	86.6	86.9	86.9	87.2	87.2	87.2	87.2	87.2	87.2	87.2
GE 1200	77.5	83.1	84.6	85.9	88.0	88.3	89.2	89.8	89.8	90.1	90.1	90.1	90.1	90.1	90.1	90.1
GE 1000	78.2	84.3	86.0	87.4	89.5	89.8	91.5	92.2	92.2	92.5	92.5	92.7	92.7	92.7	92.7	92.7
GE 900	78.5	84.8	86.6	88.1	90.1	90.4	92.2	92.9	92.9	93.2	93.2	93.4	93.4	93.4	93.4	93.4
GE 800	78.5	84.8	86.6	88.1	90.1	90.4	92.2	92.9	92.9	93.3	93.3	93.5	93.5	93.5	93.5	93.5
GE 700	78.8	85.2	87.2	88.7	90.8	91.1	92.8	93.7	93.8	94.2	94.2	94.4	94.5	94.5	94.5	94.5
GE 600	78.9	85.5	87.5	89.1	91.2	91.5	93.2	94.3	94.4	94.9	94.9	95.2	95.3	95.3	95.3	95.3
GE 500	79.0	85.8	87.8	89.5	91.5	91.9	93.7	94.7	95.1	95.9	96.1	96.3	96.6	96.6	96.6	96.6
GE 400	79.0	85.8	87.8	89.9	91.9	92.4	94.5	95.6	95.9	96.8	97.0	97.2	97.4	97.4	97.4	97.4
GE 300	79.0	85.8	87.8	89.9	92.3	92.7	94.9	96.0	96.5	97.5	97.7	98.0	98.2	98.2	98.2	98.2
GE 200	79.0	85.8	87.8	89.9	92.3	92.7	95.2	96.3	96.8	98.1	98.5	98.7	99.2	99.2	99.2	99.4
GE 100	79.0	85.8	87.8	89.9	92.3	92.7	95.2	96.3	96.8	98.2	98.6	98.8	99.4	99.4	99.4	100.0
GE 0	79.0	85.8	87.8	89.9	92.3	92.7	95.2	96.3	96.8	98.2	98.6	98.8	99.4	99.4	99.4	100.0

TOTAL NUMBER OF OBSERVATIONS: 930



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(LST): ALL

CEILING IN FEET	VISIBILITY IN STATUTE MILES																
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2	GE 1 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	46.6	48.4	49.0	49.2	49.6	49.7	49.7	49.8	49.8	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9
GE 20000	50.3	52.6	53.2	53.5	53.8	53.9	54.0	54.1	54.1	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
GE 18000	50.5	52.8	53.4	53.7	54.0	54.1	54.2	54.3	54.3	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4
GE 16000	50.6	52.8	53.5	53.7	54.1	54.2	54.2	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.5	54.5	54.5
GE 14000	51.1	53.5	54.1	54.4	54.8	54.8	54.9	55.0	55.0	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1
GE 12000	51.7	54.2	54.9	55.1	55.5	55.6	55.6	55.7	55.7	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.9
GE 10000	53.9	56.7	57.3	57.6	58.0	58.1	58.2	58.3	58.3	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.5
GE 9000	54.2	57.0	57.7	58.0	58.4	58.5	58.6	58.7	58.7	58.8	58.8	58.8	58.8	58.8	58.8	58.9	58.9
GE 8000	56.7	59.7	60.5	60.8	61.3	61.3	61.5	61.7	61.7	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8
GE 7000	57.5	60.6	61.4	61.7	62.2	62.3	62.5	62.7	62.7	62.8	62.8	62.8	62.8	62.8	62.8	62.8	62.8
GE 6000	59.3	62.9	63.7	64.2	64.8	64.9	65.1	65.3	65.3	65.4	65.4	65.4	65.4	65.4	65.5	65.5	65.5
GE 5000	61.4	65.4	66.4	66.9	67.6	67.7	67.9	68.1	68.1	68.3	68.3	68.3	68.3	68.3	68.3	68.4	68.4
GE 4500	62.0	66.2	67.2	67.8	68.6	68.7	69.0	69.2	69.2	69.4	69.4	69.4	69.4	69.4	69.5	69.5	69.5
GE 4000	63.8	68.4	69.4	70.2	71.1	71.3	71.5	71.8	71.8	72.0	72.1	72.1	72.1	72.1	72.1	72.1	72.2
GE 3500	64.9	69.7	70.8	71.6	72.5	72.7	73.0	73.2	73.2	73.5	73.5	73.5	73.6	73.6	73.6	73.6	73.6
GE 3000	66.6	72.0	73.2	74.0	75.1	75.3	75.7	76.0	76.0	76.3	76.4	76.4	76.5	76.5	76.5	76.5	76.5
GE 2500	68.1	73.8	75.3	76.2	77.4	77.6	78.2	78.6	78.6	78.9	79.0	79.0	79.1	79.1	79.1	79.1	79.2
GE 2000	69.8	76.3	78.0	79.0	80.4	80.7	81.3	81.8	81.9	82.2	82.2	82.3	82.4	82.4	82.4	82.4	82.4
GE 1800	70.0	76.6	78.4	79.4	80.9	81.2	81.8	82.3	82.4	82.7	82.7	82.8	82.9	82.9	82.9	82.9	82.9
GE 1500	71.3	78.4	80.3	81.5	83.1	83.5	84.2	84.8	84.9	85.2	85.3	85.3	85.5	85.5	85.5	85.5	85.5
GE 1200	72.3	80.2	82.2	83.6	85.6	86.2	87.2	87.8	87.9	88.3	88.4	88.4	88.6	88.6	88.6	88.6	88.6
GE 1000	73.1	81.4	83.5	85.0	87.2	87.8	89.0	89.7	89.8	90.3	90.5	90.5	90.7	90.8	90.8	90.8	90.8
GE 900	73.4	81.9	84.3	85.9	88.1	88.8	90.1	90.9	91.0	91.5	91.7	91.7	91.9	91.9	91.9	91.9	92.0
GE 800	73.4	82.1	84.5	86.2	88.5	89.2	90.6	91.4	91.6	92.1	92.3	92.4	92.6	92.6	92.6	92.6	92.6
GE 700	73.5	82.4	84.9	86.5	89.0	89.7	91.2	92.2	92.3	92.9	93.2	93.2	93.5	93.5	93.5	93.5	93.5
GE 600	73.6	82.8	85.3	87.1	89.7	90.4	91.9	93.0	93.2	93.9	94.2	94.3	94.5	94.6	94.6	94.6	94.6
GE 500	73.7	83.1	85.7	87.5	90.2	91.0	92.6	93.8	94.1	94.9	95.3	95.4	95.8	95.9	95.9	95.9	96.0
GE 400	73.7	83.2	85.8	87.8	90.6	91.5	93.4	94.7	95.0	95.9	96.4	96.4	96.9	96.9	97.1	97.1	97.1
GE 300	73.7	83.2	85.8	87.8	90.9	91.7	93.8	95.1	95.5	96.5	97.2	97.3	97.8	97.8	98.0	98.1	98.1
GE 200	73.7	83.2	85.8	87.8	90.9	91.8	94.0	95.5	96.0	97.2	98.1	98.1	98.9	99.0	99.2	99.3	99.3
GE 100	73.7	83.2	85.8	87.8	90.9	91.8	94.0	95.5	96.0	97.2	98.1	98.1	98.9	99.2	99.5	99.8	99.8
GE 0	73.7	83.2	85.8	87.8	90.9	91.8	94.0	95.5	96.0	97.2	98.1	98.1	98.9	99.2	99.5	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 7440

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(LST): 0000-0200

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	61.0	62.0	62.4	62.8	62.9	62.9	63.2	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3
GE 20000	64.3	65.3	65.8	66.1	66.2	66.2	66.6	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7
GE 18000	64.4	65.4	65.9	66.2	66.3	66.3	66.7	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8
GE 16000	64.6	65.6	66.0	66.3	66.4	66.4	66.8	66.9	66.9	66.9	66.9	66.9	66.9	66.9	66.9	66.9
GE 14000	64.6	65.6	66.0	66.3	66.4	66.4	66.8	66.9	66.9	66.9	66.9	66.9	66.9	66.9	66.9	66.9
GE 12000	64.7	65.7	66.1	66.4	66.6	66.6	66.9	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0
GE 10000	69.3	70.3	70.8	71.1	71.2	71.2	71.7	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8
GE 9000	69.9	70.9	71.3	71.7	71.8	71.8	72.2	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
GE 8000	72.0	73.3	73.9	74.2	74.3	74.3	74.8	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9
GE 7000	72.3	73.7	74.2	74.6	74.7	74.7	75.1	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
GE 6000	73.8	75.3	75.9	76.2	76.3	76.3	76.8	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
GE 5000	77.2	79.0	79.6	79.9	80.0	80.0	80.4	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6
GE 4500	78.1	79.9	80.4	80.8	80.9	80.9	81.3	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4
GE 4000	80.7	82.7	83.2	83.6	83.7	83.7	84.1	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2	84.2
GE 3500	81.7	83.9	84.4	84.8	84.9	84.9	85.3	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4
GE 3000	82.9	85.3	85.9	86.2	86.4	86.4	86.9	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0
GE 2500	83.7	87.1	87.9	88.2	88.4	88.4	88.9	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
GE 2000	84.6	88.6	89.4	89.8	90.3	90.4	90.9	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
GE 1800	85.1	89.1	90.0	90.3	90.9	91.0	91.4	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
GE 1500	85.4	89.6	90.7	91.0	91.6	91.7	92.1	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2
GE 1200	85.9	90.7	91.8	92.2	92.9	93.0	93.4	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7
GE 1000	86.1	91.0	92.4	92.9	93.8	93.9	94.3	94.6	94.6	94.7	94.7	94.7	94.7	94.7	94.7	94.7
GE 900	86.6	91.7	93.6	94.0	95.1	95.2	95.7	96.0	96.0	96.1	96.1	96.1	96.1	96.1	96.1	96.1
GE 800	86.6	91.7	93.6	94.2	95.4	95.6	96.0	96.3	96.6	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 700	86.9	92.0	94.0	94.7	96.1	96.2	96.7	97.1	97.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4
GE 600	87.1	92.4	94.6	95.2	96.7	96.8	97.2	97.7	97.9	98.0	98.0	98.0	98.0	98.0	98.0	98.0
GE 500	87.2	92.8	95.0	95.7	97.1	97.2	97.7	98.4	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8
GE 400	87.3	92.9	95.1	95.8	97.3	97.4	98.1	98.9	99.1	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 300	87.4	93.0	95.2	95.9	97.6	97.7	98.3	99.1	99.3	99.6	99.6	99.6	99.6	99.6	99.6	99.6
GE 200	87.4	93.0	95.2	95.9	97.6	97.7	98.4	99.2	99.4	99.8	99.8	99.8	99.8	99.9	99.9	99.9
GE 100	87.4	93.0	95.2	95.9	97.6	97.7	98.6	99.3	99.6	99.9	99.9	99.9	99.9	100.0	100.0	100.0
GE 0	87.4	93.0	95.2	95.9	97.6	97.7	98.6	99.3	99.6	99.9	99.9	99.9	99.9	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(LST): 0300-0500

CEILING		VISIBILITY IN STATUTE MILES																
IN FEET	10	6	5	4	3	2 1/2	2	1 1/2	1 1/4	1	3/4	5/8	1/2	5/16	1/4	0		
NO CEIL	60.4	61.3	61.6	61.9	62.0	62.0	62.3	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6		
GE 20000	62.8	63.7	63.9	64.2	64.3	64.3	64.7	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9		
GE 18000	62.8	63.7	63.9	64.2	64.3	64.3	64.7	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9		
GE 16000	63.0	63.9	64.1	64.4	64.6	64.6	64.9	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1	65.1		
GE 14000	63.1	64.0	64.2	64.6	64.7	64.7	65.0	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2	65.2		
GE 12000	63.3	64.2	64.4	64.8	64.9	64.9	65.2	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4		
GE 10000	67.7	68.8	69.0	69.3	69.4	69.4	69.8	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0		
GE 9000	68.3	69.4	69.7	70.0	70.1	70.1	70.4	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7		
GE 8000	71.4	72.9	73.1	73.4	73.6	73.6	73.9	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1		
GE 7000	72.0	73.7	73.9	74.2	74.3	74.3	74.7	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9		
GE 6000	74.3	76.0	76.2	76.6	76.7	76.7	77.0	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2		
GE 5000	77.1	78.8	79.0	79.3	79.4	79.4	79.8	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0		
GE 4500	78.0	79.8	80.0	80.3	80.4	80.4	80.8	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0		
GE 4000	79.2	81.3	81.6	81.9	82.0	82.0	82.3	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6		
GE 3500	80.0	82.1	82.3	82.7	82.8	82.8	83.1	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3		
GE 3000	82.1	84.2	84.4	84.8	84.9	84.9	85.2	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4		
GE 2500	83.2	85.4	85.9	86.3	86.8	86.8	87.1	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3		
GE 2000	84.1	87.1	87.8	88.2	88.7	88.8	89.3	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6		
GE 1800	84.7	87.7	88.3	88.8	89.2	89.3	89.9	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1		
GE 1500	85.3	88.9	89.6	90.0	90.4	90.6	91.1	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3		
GE 1200	86.3	90.0	90.7	91.1	91.7	91.8	92.3	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6		
GE 1000	86.3	90.3	91.0	91.4	92.1	92.3	93.0	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2		
GE 900	86.7	90.8	91.8	92.3	93.0	93.2	94.1	94.3	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6		
GE 800	86.9	91.1	92.2	92.8	93.4	93.7	94.6	94.8	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.1		
GE 700	87.2	91.6	92.7	93.2	94.0	94.2	95.1	95.7	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0		
GE 600	87.3	91.8	92.9	93.4	94.2	94.4	95.3	96.0	96.3	96.3	96.4	96.4	96.6	96.6	96.6	96.6		
GE 500	87.3	92.2	93.3	93.9	95.0	95.2	96.1	96.9	97.2	97.2	97.3	97.3	97.4	97.4	97.4	97.4		
GE 400	87.3	92.3	93.7	94.2	95.7	95.9	96.8	97.7	98.0	98.0	98.4	98.4	98.6	98.6	98.6	98.6		
GE 300	87.3	92.3	93.7	94.3	95.8	96.0	96.9	97.9	98.2	98.3	98.8	98.8	98.9	98.9	98.9	98.9		
GE 200	87.3	92.3	93.7	94.3	95.8	96.0	96.9	98.0	98.3	98.6	99.1	99.1	99.4	99.4	99.4	99.4		
GE 100	87.3	92.3	93.7	94.3	95.8	96.0	96.9	98.1	98.4	98.9	99.4	99.4	99.8	99.8	99.8	99.8		
GE 0	87.3	92.3	93.7	94.3	95.8	96.0	96.9	98.1	98.4	98.9	99.4	99.4	99.8	99.8	99.9	100.0		

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(LST): 0600-0800

CEILING		VISIBILITY IN STATUTE MILES															
IN FEET	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0	
NO CEIL	52.0	54.0	54.3	54.7	55.6	55.6	55.6	55.6	55.6	55.8	55.8	55.8	55.8	55.8	55.9	55.9	
GE 20000	56.9	59.2	59.7	60.1	61.0	61.0	61.0	61.0	61.0	61.2	61.2	61.2	61.2	61.2	61.3	61.3	
GE 18000	56.9	59.2	59.7	60.1	61.0	61.0	61.0	61.0	61.0	61.2	61.2	61.2	61.2	61.2	61.3	61.3	
GE 16000	57.0	59.3	59.8	60.2	61.1	61.1	61.1	61.1	61.1	61.3	61.3	61.3	61.3	61.3	61.4	61.4	
GE 14000	58.0	60.3	60.8	61.2	62.1	62.1	62.1	62.1	62.1	62.3	62.3	62.3	62.3	62.3	62.4	62.4	
GE 12000	58.4	60.8	61.2	61.7	62.6	62.6	62.6	62.6	62.6	62.8	62.8	62.8	62.8	62.8	62.9	62.9	
GE 10000	62.7	65.0	65.4	65.9	66.8	66.8	66.8	66.8	66.8	67.0	67.0	67.0	67.0	67.0	67.1	67.1	
GE 9000	62.9	65.2	65.7	66.1	67.0	67.0	67.0	67.0	67.0	67.2	67.2	67.2	67.2	67.2	67.3	67.3	
GE 8000	67.7	70.1	70.6	71.0	71.9	71.9	71.9	71.9	71.9	72.1	72.1	72.1	72.1	72.1	72.2	72.2	
GE 7000	68.6	71.0	71.4	71.9	72.8	72.8	72.8	72.8	72.8	73.0	73.0	73.0	73.0	73.0	73.1	73.1	
GE 6000	70.0	72.4	72.9	73.3	74.4	74.4	74.4	74.4	74.4	74.7	74.7	74.7	74.7	74.7	74.8	74.8	
GE 5000	72.0	74.6	75.1	75.6	76.7	76.7	76.7	76.7	76.7	76.9	76.9	76.9	76.9	76.9	77.0	77.0	
GE 4500	72.8	75.3	76.0	76.4	77.6	77.6	77.6	77.6	77.6	77.8	77.8	77.8	77.8	77.8	77.9	77.9	
GE 4000	74.2	76.9	77.6	78.2	79.3	79.3	79.3	79.3	79.3	79.6	79.6	79.6	79.6	79.6	79.7	79.7	
GE 3500	75.2	78.0	78.8	79.4	80.7	80.7	80.7	80.9	80.9	81.1	81.1	81.1	81.1	81.1	81.2	81.2	
GE 3000	76.8	79.9	80.8	81.7	83.0	83.0	83.0	83.2	83.2	83.4	83.4	83.4	83.4	83.4	83.6	83.6	
GE 2500	77.6	80.7	81.6	82.4	83.9	83.9	83.9	84.1	84.1	84.3	84.4	84.4	84.4	84.4	84.6	84.6	
GE 2000	78.2	81.7	82.7	83.6	85.2	85.3	85.4	85.7	85.7	85.9	86.0	86.0	86.0	86.0	86.1	86.1	
GE 1800	78.7	82.1	83.1	84.0	85.7	85.8	85.9	86.1	86.1	86.3	86.4	86.4	86.4	86.4	86.6	86.6	
GE 1500	80.6	84.3	85.3	86.2	88.0	88.1	88.2	88.4	88.4	88.7	88.8	88.8	88.8	88.8	88.9	88.9	
GE 1200	81.4	85.6	86.6	87.7	89.4	89.6	89.8	90.0	90.0	90.3	90.4	90.4	90.4	90.4	90.6	90.6	
GE 1000	81.8	86.1	87.4	88.6	90.3	90.4	90.8	91.1	91.1	91.4	91.6	91.6	91.6	91.6	91.7	91.7	
GE 900	82.0	86.4	87.9	89.0	90.8	90.9	91.3	91.9	92.3	92.7	92.8	92.8	92.8	92.8	92.9	92.9	
GE 800	82.4	87.1	88.6	89.7	91.4	91.6	92.0	92.6	93.0	93.4	93.6	93.6	93.6	93.6	93.7	93.7	
GE 700	83.2	88.2	89.7	90.8	92.7	92.8	93.3	93.9	94.3	94.8	95.0	95.0	95.2	95.2	95.3	95.3	
GE 600	83.3	88.4	89.9	91.1	93.0	93.1	93.7	94.2	94.7	95.1	95.6	95.6	95.8	95.8	95.9	95.9	
GE 500	83.7	89.0	90.7	91.9	93.9	94.0	94.6	95.1	95.7	96.1	96.6	96.6	96.8	96.8	96.9	96.9	
GE 400	83.7	89.1	91.1	92.6	94.9	95.2	95.9	96.4	97.0	97.4	98.0	98.0	98.2	98.2	98.3	98.3	
GE 300	83.7	89.2	91.3	92.8	95.1	95.4	96.2	96.8	97.3	97.8	98.3	98.3	98.6	98.6	98.7	98.7	
GE 200	83.7	89.2	91.3	92.8	95.1	95.4	96.3	97.0	97.8	98.3	99.1	99.1	99.6	99.6	99.8	99.8	
GE 100	83.7	89.2	91.3	92.8	95.1	95.4	96.3	97.0	97.8	98.3	99.1	99.1	99.6	99.6	99.8	100.0	
GE 0	83.7	89.2	91.3	92.8	95.1	95.4	96.3	97.0	97.8	98.3	99.1	99.1	99.6	99.6	99.8	100.0	

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 76-87  
MONTH: APR HOURS(LST): 0900-1100

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	53.6	54.3	54.8	54.9	55.4	55.4	55.6	55.6	55.7	55.7	55.7	55.7	55.8	55.8	56.0	56.0
GE 20000	59.4	60.2	60.7	60.9	61.6	61.6	61.7	61.7	61.8	61.8	61.8	61.8	61.9	61.9	62.1	62.1
GE 18000	59.8	60.6	61.0	61.2	61.9	61.9	62.0	62.0	62.1	62.1	62.1	62.1	62.2	62.2	62.4	62.4
GE 16000	59.8	60.6	61.0	61.2	61.9	61.9	62.0	62.0	62.1	62.1	62.1	62.1	62.2	62.2	62.4	62.4
GE 14000	60.2	61.2	61.7	61.9	62.6	62.6	62.7	62.7	62.8	62.8	62.8	62.8	62.9	62.9	63.1	63.1
GE 12000	60.9	62.0	62.4	62.7	63.3	63.3	63.4	63.4	63.6	63.6	63.6	63.6	63.7	63.7	63.9	63.9
GE 10000	66.0	67.1	67.6	67.8	68.4	68.4	68.6	68.6	68.7	68.7	68.7	68.7	68.8	68.8	69.0	69.0
GE 9000	66.2	67.3	67.8	68.0	68.7	68.7	68.8	68.8	68.9	68.9	68.9	68.9	69.0	69.0	69.2	69.2
GE 8000	69.1	70.3	70.8	71.0	71.7	71.7	71.8	71.8	71.9	71.9	71.9	71.9	72.0	72.0	72.2	72.2
GE 7000	69.2	70.6	71.0	71.2	71.9	71.9	72.0	72.0	72.1	72.1	72.1	72.1	72.2	72.2	72.4	72.4
GE 6000	70.1	71.6	72.1	72.3	73.0	73.0	73.1	73.1	73.2	73.2	73.2	73.2	73.3	73.3	73.6	73.6
GE 5000	71.8	73.2	74.1	74.3	75.0	75.0	75.1	75.1	75.2	75.2	75.2	75.2	75.3	75.3	75.6	75.6
GE 4500	72.3	73.9	74.8	75.0	75.8	75.8	75.9	75.9	76.0	76.0	76.0	76.0	76.1	76.1	76.3	76.3
GE 4000	73.2	74.8	75.8	76.0	76.8	76.8	77.0	77.0	77.1	77.1	77.1	77.1	77.2	77.2	77.4	77.4
GE 3500	74.3	75.9	76.9	77.1	77.9	77.9	78.3	78.3	78.4	78.4	78.4	78.4	78.6	78.6	78.8	78.8
GE 3000	76.2	77.9	79.3	79.7	81.0	81.0	81.6	81.6	81.7	81.7	81.7	81.7	81.8	81.8	82.0	82.0
GE 2500	77.7	79.6	81.0	81.3	82.7	82.7	83.2	83.4	83.6	83.6	83.6	83.6	83.7	83.7	83.9	83.9
GE 2000	78.0	81.3	82.9	83.2	84.7	84.7	85.2	85.4	85.6	85.6	85.6	85.6	85.7	85.7	85.9	85.9
GE 1800	79.2	81.8	83.3	83.7	85.2	85.2	85.8	86.0	86.1	86.1	86.1	86.1	86.2	86.2	86.4	86.4
GE 1500	80.4	83.2	84.8	85.1	86.8	86.8	87.3	87.6	87.7	87.7	87.7	87.7	87.8	87.8	88.0	88.0
GE 1200	82.0	85.4	87.2	87.7	89.3	89.6	90.6	90.8	90.9	90.9	90.9	90.9	91.0	91.0	91.2	91.2
GE 1000	82.6	86.8	88.7	89.1	90.8	91.2	92.6	92.8	92.9	92.9	92.9	92.9	93.0	93.0	93.2	93.2
GE 900	83.1	87.4	89.3	89.8	91.4	92.0	93.3	93.6	93.7	93.7	93.7	93.7	94.1	94.1	94.3	94.3
GE 800	83.3	87.9	89.8	90.2	91.9	92.4	93.8	94.0	94.1	94.1	94.1	94.1	94.3	94.6	94.8	94.8
GE 700	84.0	88.7	90.6	91.1	93.1	93.7	95.0	95.3	95.6	95.7	95.9	95.9	96.2	96.2	96.4	96.4
GE 600	84.1	88.9	90.8	91.3	93.3	93.9	95.2	95.6	95.8	95.9	96.3	96.3	96.7	96.7	97.1	97.2
GE 500	84.4	89.4	91.3	91.9	93.9	94.4	96.2	96.7	96.9	97.0	97.4	97.4	97.8	97.8	98.2	98.3
GE 400	84.4	89.6	91.7	92.2	94.3	95.0	96.8	97.6	97.8	97.9	98.3	98.3	98.7	98.7	99.1	99.2
GE 300	84.4	89.7	91.8	92.3	94.6	95.2	97.0	97.8	98.0	98.2	98.7	98.7	99.0	99.0	99.4	99.6
GE 200	84.4	89.7	91.8	92.3	94.6	95.2	97.0	97.8	98.1	98.3	99.1	99.1	99.4	99.4	99.9	100.0
GE 100	84.4	89.7	91.8	92.3	94.6	95.2	97.0	97.8	98.1	98.3	99.1	99.1	99.4	99.4	99.9	100.0
GE 0	84.4	89.7	91.8	92.3	94.6	95.2	97.0	97.8	98.1	98.3	99.1	99.1	99.4	99.4	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORMS AFB MD

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(IST): 1200-1400

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	50.2	51.6	51.6	51.6	51.8	51.8	52.3	52.6	52.6	52.6	52.6	52.6	52.7	52.7	52.7	52.7
GE 20000	57.2	58.8	58.8	58.8	59.0	59.0	59.6	59.8	59.8	59.8	59.8	59.8	59.9	59.9	59.9	59.9
GE 18000	57.3	58.9	58.9	58.9	59.1	59.1	59.7	59.9	59.9	59.9	59.9	59.9	60.0	60.0	60.0	60.0
GE 16000	57.3	58.9	58.9	58.9	59.1	59.1	59.7	59.9	59.9	59.9	59.9	59.9	60.0	60.0	60.0	60.0
GE 14000	57.6	59.3	59.3	59.3	59.6	59.6	60.1	60.3	60.3	60.3	60.3	60.3	60.4	60.4	60.4	60.4
GE 12000	58.8	61.0	61.0	61.0	61.2	61.2	61.8	62.0	62.0	62.0	62.0	62.0	62.1	62.1	62.1	62.1
GE 10000	63.6	65.8	65.8	65.8	66.0	66.0	66.6	66.8	66.8	66.8	66.8	66.8	66.9	66.9	66.9	66.9
GE 9000	64.3	66.6	66.6	66.6	66.8	66.8	67.3	67.6	67.6	67.6	67.6	67.6	67.7	67.7	67.7	67.7
GE 8000	66.4	68.7	68.9	69.0	69.2	69.2	69.8	70.0	70.0	70.0	70.0	70.0	70.1	70.1	70.1	70.1
GE 7000	66.7	68.9	69.1	69.2	69.4	69.4	70.0	70.2	70.2	70.2	70.2	70.2	70.3	70.3	70.3	70.3
GE 6000	67.4	69.7	69.9	70.0	70.2	70.2	70.8	71.0	71.0	71.0	71.0	71.0	71.1	71.1	71.1	71.1
GE 5000	69.2	71.6	71.8	71.9	72.1	72.1	72.7	72.9	72.9	72.9	72.9	72.9	73.0	73.0	73.0	73.0
GE 4500	69.6	72.2	72.4	72.6	72.8	72.8	73.3	73.6	73.6	73.6	73.6	73.6	73.7	73.7	73.7	73.7
GE 4000	71.6	74.6	74.8	75.0	75.2	75.2	75.8	76.0	76.0	76.0	76.0	76.0	76.1	76.1	76.1	76.1
GE 3500	73.6	76.8	77.0	77.3	77.7	77.7	78.2	78.4	78.4	78.4	78.4	78.4	78.6	78.6	78.6	78.6
GE 3000	76.7	80.4	80.8	81.2	81.6	81.6	82.1	82.3	82.3	82.3	82.3	82.3	82.4	82.4	82.4	82.4
GE 2500	78.1	82.0	82.3	82.8	83.1	83.1	83.7	83.9	83.9	83.9	83.9	83.9	84.0	84.0	84.0	84.0
GE 2000	80.9	84.9	85.2	85.8	86.2	86.2	86.8	87.0	87.0	87.0	87.0	87.0	87.1	87.1	87.1	87.1
GE 1800	81.0	85.1	85.4	86.0	86.6	86.7	87.2	87.4	87.4	87.4	87.4	87.4	87.6	87.6	87.6	87.6
GE 1500	82.7	87.3	87.7	88.2	88.8	88.9	89.7	89.9	89.9	89.9	89.9	89.9	90.0	90.0	90.0	90.0
GE 1200	84.1	89.4	90.3	90.9	91.4	91.7	92.8	93.0	93.0	93.0	93.0	93.0	93.1	93.1	93.1	93.1
GE 1000	84.2	89.9	90.8	91.3	91.9	92.1	93.4	93.7	93.7	93.7	93.7	93.7	93.8	93.8	93.8	93.8
GE 900	84.7	90.6	91.4	92.3	93.2	93.4	94.8	95.0	95.0	95.0	95.1	95.2	95.4	95.4	95.4	95.4
GE 800	85.2	91.4	92.3	93.2	94.1	94.7	96.0	96.3	96.3	96.3	96.4	96.6	96.8	96.8	96.8	96.8
GE 700	85.4	91.9	92.9	93.9	94.8	95.3	96.7	97.3	97.3	97.3	97.4	97.6	97.9	97.9	97.9	97.9
GE 600	85.4	91.9	92.9	93.9	94.8	95.3	96.8	97.4	97.4	97.4	97.6	97.7	98.0	98.0	98.0	98.0
GE 500	85.6	92.1	93.2	94.2	95.1	95.7	97.4	98.3	98.3	98.3	98.4	98.6	98.9	98.9	98.9	98.9
GE 400	85.9	92.7	93.9	94.9	95.8	96.4	98.2	99.1	99.1	99.1	99.2	99.3	99.7	99.7	99.7	99.7
GE 300	85.9	92.7	93.9	94.9	95.8	96.4	98.2	99.1	99.1	99.1	99.2	99.3	99.7	99.7	99.7	99.8
GE 200	85.9	92.7	93.9	94.9	95.8	96.4	98.2	99.1	99.1	99.1	99.2	99.3	99.7	99.7	99.7	100.0
GE 100	85.9	92.7	93.9	94.9	95.8	96.4	98.2	99.1	99.1	99.1	99.2	99.3	99.7	99.7	99.7	100.0
GE 0	85.9	92.7	93.9	94.9	95.8	96.4	98.2	99.1	99.1	99.1	99.2	99.3	99.7	99.7	99.7	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(LST): 1500-1700

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2	GE 1 1/2	GE 1	GE 1/2	GE 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	51.3	52.1	52.3	52.7	53.1	53.1	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4
GE 20000	58.3	59.4	59.8	60.1	60.6	60.6	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9
GE 18000	58.3	59.4	59.8	60.2	60.7	60.7	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0
GE 16000	58.3	59.4	59.8	60.2	60.7	60.7	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0
GE 14000	58.9	60.4	60.8	61.3	61.9	61.9	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2
GE 12000	61.1	62.7	63.0	63.6	64.1	64.1	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4
GE 10000	65.0	66.9	67.3	67.9	68.6	68.6	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9
GE 9000	65.3	67.2	67.7	68.2	68.9	68.9	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2
GE 8000	67.9	69.8	70.3	70.9	71.6	71.6	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9
GE 7000	68.4	70.3	70.9	71.4	72.1	72.1	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4
GE 6000	69.4	71.4	72.0	72.6	73.2	73.2	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
GE 5000	71.4	73.7	74.2	74.8	75.4	75.4	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8	75.8
GE 4500	72.6	75.0	75.6	76.1	76.8	76.8	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
GE 4000	74.6	77.8	78.4	79.1	80.0	80.0	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3
GE 3500	76.4	79.8	80.4	81.1	82.0	82.0	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3
GE 3000	79.6	83.1	83.9	84.6	85.4	85.4	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
GE 2500	82.4	86.2	87.1	87.8	88.7	88.7	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
GE 2000	84.1	88.2	89.1	89.8	90.7	90.7	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
GE 1800	84.2	88.7	89.6	90.2	91.2	91.2	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
GE 1500	85.2	90.0	90.9	91.6	92.6	92.6	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
GE 1200	85.6	90.7	91.6	92.6	93.7	93.7	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
GE 1000	86.0	91.3	92.2	93.3	94.4	94.4	95.4	95.6	95.6	95.6	95.7	95.7	95.7	95.7	95.7	95.7
GE 900	86.8	92.3	93.2	94.6	95.7	95.7	96.8	96.9	96.9	96.9	97.0	97.0	97.0	97.0	97.0	97.0
GE 800	87.0	92.7	93.6	94.9	96.0	96.1	97.2	97.3	97.3	97.3	97.6	97.6	97.6	97.7	97.7	97.7
GE 700	87.0	92.7	93.6	94.9	96.0	96.1	97.2	97.4	97.4	97.4	97.7	97.7	97.7	97.8	97.8	97.8
GE 600	87.1	92.8	93.7	95.0	96.1	96.4	97.6	97.8	97.9	98.2	98.2	98.2	98.2	98.3	98.3	98.3
GE 500	87.2	93.0	93.9	95.2	96.3	96.8	98.2	98.6	98.7	99.0	99.0	99.0	99.0	99.1	99.1	99.1
GE 400	87.2	93.0	94.0	95.3	96.6	97.0	98.6	98.9	99.0	99.4	99.4	99.4	99.4	99.6	99.6	99.7
GE 300	87.2	93.0	94.0	95.3	96.6	97.0	98.6	98.9	99.0	99.4	99.4	99.4	99.4	99.6	99.6	99.7
GE 200	87.2	93.0	94.0	95.3	96.6	97.0	98.9	99.2	99.3	99.8	99.8	99.8	99.8	99.9	99.9	100.0
GE 100	87.2	93.0	94.0	95.3	96.6	97.0	98.9	99.2	99.3	99.8	99.8	99.8	99.8	99.9	99.9	100.0
GE 0	87.2	93.0	94.0	95.3	96.6	97.0	98.9	99.2	99.3	99.8	99.8	99.8	99.8	99.9	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(LST): 1800-2000

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2	GE 1 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	52.9	53.7	54.8	54.9	55.2	55.2	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3	55.3
GE 20000	59.4	60.3	61.6	61.7	62.0	62.0	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1
GE 18000	59.4	60.3	61.6	61.7	62.0	62.0	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1
GE 16000	59.4	60.3	61.6	61.7	62.0	62.0	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1
GE 14000	60.1	61.6	62.8	62.9	63.3	63.3	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4
GE 12000	61.2	62.7	63.9	64.0	64.4	64.4	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6	64.6
GE 10000	65.0	67.2	68.9	69.0	69.6	69.6	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
GE 9000	65.8	68.0	69.7	69.8	70.3	70.3	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4
GE 8000	69.9	72.1	73.8	73.9	74.4	74.4	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6
GE 7000	71.3	73.7	75.3	75.4	76.0	76.0	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
GE 6000	73.1	75.6	77.2	77.3	77.9	77.9	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
GE 5000	75.6	78.1	79.9	80.1	80.7	80.7	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8
GE 4500	76.6	79.1	80.9	81.1	81.7	81.7	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8
GE 4000	79.1	82.4	84.2	84.4	85.1	85.1	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
GE 3500	81.7	85.3	87.1	87.3	88.0	88.0	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1
GE 3000	83.8	87.6	89.3	89.6	90.2	90.2	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
GE 2500	85.8	89.7	91.4	91.8	92.4	92.4	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6
GE 2000	86.3	90.3	92.1	92.8	93.6	93.6	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7
GE 1800	86.3	90.3	92.1	92.8	93.6	93.6	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7
GE 1500	86.9	91.2	93.0	93.7	94.6	94.6	94.9	94.9	94.9	95.0	95.0	95.0	95.0	95.0	95.0	95.0
GE 1200	87.0	91.3	93.1	93.8	94.7	94.7	95.2	95.3	95.6	95.7	95.7	95.7	95.7	95.7	95.7	95.7
GE 1000	87.2	91.6	93.3	94.0	94.9	94.9	95.6	95.8	96.1	96.3	96.3	96.3	96.3	96.3	96.3	96.3
GE 900	87.7	92.2	94.1	94.8	95.9	95.9	96.6	96.8	97.1	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 800	87.7	92.3	94.2	94.9	96.0	96.0	96.7	96.9	97.2	97.4	97.4	97.4	97.4	97.4	97.4	97.4
GE 700	87.7	92.3	94.2	94.9	96.0	96.0	96.7	96.9	97.2	97.6	97.6	97.6	97.6	97.6	97.6	97.6
GE 600	87.9	92.6	94.4	95.1	96.2	96.2	96.9	97.1	97.4	97.8	97.8	97.8	97.8	97.8	97.8	97.8
GE 500	87.9	92.6	94.6	95.2	96.3	96.4	97.2	97.8	98.1	98.6	98.6	98.6	98.6	98.6	98.6	98.6
GE 400	87.9	92.7	94.7	95.3	96.4	96.6	97.7	98.2	98.6	99.4	99.4	99.4	99.4	99.4	99.4	99.4
GE 300	87.9	92.7	94.7	95.3	96.4	96.6	98.1	98.8	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 200	87.9	92.7	94.7	95.3	96.4	96.6	98.1	98.8	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	87.9	92.7	94.7	95.3	96.4	96.6	98.1	98.8	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 0	87.9	92.7	94.7	95.3	96.4	96.6	98.1	98.8	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 900



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(LST): 2100-2300

CEILING IN FEET	VISIBILITY IN STATUTE MILES														
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	60.7	61.2	61.2	61.3	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8
GE 20000	64.3	64.9	64.9	65.0	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4
GE 18000	64.3	64.9	64.9	65.0	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4
GE 16000	64.3	64.9	64.9	65.0	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4
GE 14000	65.6	66.4	66.4	66.6	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0
GE 12000	66.1	67.0	67.0	67.1	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6
GE 10000	70.0	71.1	71.2	71.3	71.9	71.9	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
GE 9000	70.3	71.4	71.6	71.9	72.4	72.4	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6
GE 8000	74.6	75.8	75.9	76.2	76.8	76.8	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
GE 7000	75.7	76.9	77.0	77.3	77.9	77.9	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
GE 6000	76.6	77.9	78.0	78.3	78.9	78.9	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0
GE 5000	79.6	81.4	81.6	81.9	82.4	82.4	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6
GE 4500	80.4	82.3	82.4	82.8	83.3	83.3	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4
GE 4000	82.8	85.0	85.1	85.4	86.0	86.0	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1
GE 3500	84.2	86.8	86.9	87.4	88.0	88.0	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1
GE 3000	85.6	88.1	88.2	88.8	89.3	89.3	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4
GE 2500	87.1	90.0	90.2	90.9	91.6	91.6	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7
GE 2000	87.9	91.0	91.3	92.0	92.7	92.7	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8
GE 1800	88.0	91.1	91.4	92.1	92.8	92.8	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
GE 1500	88.3	91.6	92.0	92.7	93.6	93.6	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7
GE 1200	88.9	92.3	92.8	93.4	94.3	94.3	94.4	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
GE 1000	89.2	93.0	93.4	94.1	95.3	95.3	95.6	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
GE 900	89.7	93.8	94.2	94.9	96.1	96.1	96.3	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
GE 800	89.7	94.0	94.6	95.2	96.4	96.4	96.8	97.4	97.4	97.4	97.6	97.6	97.6	97.6	97.6
GE 700	89.8	94.2	94.9	95.6	96.8	96.8	97.1	97.8	97.8	97.8	97.9	97.9	97.9	97.9	97.9
GE 600	89.8	94.2	94.9	95.6	96.8	96.8	97.1	97.8	97.8	97.8	97.9	97.9	97.9	97.9	97.9
GE 500	89.8	94.2	95.1	95.8	97.1	97.1	97.4	98.3	98.3	98.4	98.6	98.6	98.6	98.6	98.6
GE 400	89.9	94.3	95.2	95.9	97.4	97.4	97.4	98.1	99.0	99.0	99.1	99.2	99.2	99.2	99.2
GE 300	89.9	94.3	95.2	95.9	97.4	97.4	97.4	98.3	99.3	99.3	99.4	99.6	99.6	99.7	99.7
GE 200	89.9	94.3	95.2	95.9	97.4	97.4	97.4	98.3	99.3	99.3	99.4	99.6	99.6	99.9	99.9
GE 100	89.9	94.3	95.2	95.9	97.4	97.4	97.4	98.4	99.4	99.4	99.6	99.7	99.7	100.0	100.0
GE 50	89.9	94.3	95.2	95.9	97.4	97.4	97.4	98.4	99.4	99.4	99.6	99.7	99.7	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(LST): ALL

CEILING		VISIBILITY IN STATUTE MILES															
IN FEET		GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	55.3	56.3	56.6	56.8	57.2	57.2	57.4	57.5	57.5	57.6	57.6	57.6	57.6	57.6	57.6	57.6	57.6
GE 20000	60.3	61.5	61.9	62.1	62.5	62.5	62.7	62.8	62.8	62.8	62.8	62.8	62.8	62.9	62.9	62.9	62.9
GE 18000	60.4	61.6	61.9	62.2	62.6	62.6	62.8	62.9	62.9	62.9	62.9	62.9	62.9	63.0	63.0	63.0	63.0
GE 16000	60.5	61.6	62.0	62.3	62.7	62.7	62.9	62.9	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.1	63.1
GE 14000	61.0	62.4	62.8	63.0	63.4	63.4	63.7	63.7	63.8	63.8	63.8	63.8	63.8	63.8	63.8	63.8	63.8
GE 12000	61.8	63.3	63.6	63.9	64.3	64.3	64.6	64.6	64.6	64.7	64.7	64.7	64.7	64.7	64.7	64.7	64.7
GE 10000	66.2	67.8	68.3	68.5	69.0	69.0	69.2	69.3	69.3	69.3	69.3	69.3	69.3	69.4	69.4	69.4	69.4
GE 9000	66.6	68.3	68.7	69.0	69.5	69.5	69.8	69.8	69.8	69.9	69.9	69.9	69.9	69.9	69.9	69.9	69.9
GE 8000	69.9	71.6	72.2	72.5	72.9	72.9	73.2	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.4	73.4
GE 7000	70.5	72.3	72.9	73.2	73.6	73.6	73.9	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.1	74.1
GE 6000	71.8	73.7	74.3	74.6	75.1	75.1	75.3	75.4	75.4	75.4	75.4	75.4	75.4	75.5	75.5	75.5	75.5
GE 5000	74.2	76.3	76.9	77.2	77.7	77.7	78.0	78.0	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.2	78.2
GE 4500	75.0	77.2	77.8	78.1	78.7	78.7	78.9	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.1	79.1
GE 4000	76.9	79.4	80.1	80.5	81.0	81.0	81.3	81.3	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.5	81.5
GE 3500	78.4	81.1	81.7	82.2	82.7	82.7	83.0	83.1	83.1	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
GE 3000	80.4	83.3	84.1	84.6	85.2	85.2	85.5	85.6	85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.8	85.8
GE 2500	81.9	85.1	85.9	86.4	87.2	87.2	87.5	87.6	87.6	87.7	87.7	87.7	87.7	87.7	87.7	87.8	87.8
GE 2000	83.1	86.6	87.6	88.1	89.0	89.0	89.4	89.5	89.5	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6
GE 1800	83.4	87.0	87.9	88.5	89.4	89.4	89.8	89.9	89.9	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
GE 1500	84.4	88.3	89.2	89.8	90.8	90.8	91.2	91.4	91.4	91.4	91.4	91.4	91.4	91.5	91.5	91.5	91.5
GE 1200	85.2	89.4	90.5	91.2	92.2	92.3	92.8	93.0	93.1	93.1	93.1	93.1	93.1	93.2	93.2	93.2	93.2
GE 1000	85.4	90.0	91.2	91.8	92.9	93.1	93.8	94.1	94.1	94.2	94.3	94.3	94.3	94.3	94.3	94.3	94.3
GE 900	85.9	90.7	91.9	92.7	93.9	94.1	94.9	95.2	95.3	95.4	95.4	95.4	95.5	95.5	95.5	95.6	95.6
GE 800	86.1	91.0	92.3	93.1	94.3	94.6	95.4	95.7	95.9	96.0	96.1	96.1	96.2	96.2	96.2	96.2	96.2
GE 700	86.4	91.4	92.8	93.6	94.9	95.1	96.0	96.4	96.6	96.8	96.9	96.9	97.0	97.0	97.0	97.1	97.1
GE 600	86.5	91.6	93.0	93.8	95.1	95.4	96.2	96.7	96.9	97.1	97.2	97.2	97.4	97.4	97.4	97.4	97.5
GE 500	86.6	91.9	93.4	94.2	95.6	95.9	96.9	97.5	97.7	97.9	98.1	98.1	98.2	98.2	98.2	98.3	98.3
GE 400	86.7	92.1	93.7	94.5	96.1	96.4	97.5	98.2	98.4	98.7	98.9	98.9	99.1	99.1	99.1	99.2	99.2
GE 300	86.7	92.1	93.7	94.6	96.2	96.5	97.7	98.5	98.7	99.0	99.2	99.2	99.3	99.4	99.4	99.4	99.5
GE 200	86.7	92.1	93.7	94.6	96.2	96.5	97.8	98.6	98.8	99.2	99.5	99.5	99.7	99.7	99.7	99.8	99.9
GE 100	86.7	92.1	93.7	94.6	96.2	96.5	97.8	98.6	98.9	99.2	99.5	99.5	99.8	99.8	99.8	99.9	100.0
GE 0	86.7	92.1	93.7	94.6	96.2	96.5	97.8	98.6	98.9	99.2	99.5	99.5	99.8	99.8	99.8	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS: 7200

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS: 0000-0200

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	60.4	62.3	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
GE 20000	64.1	66.1	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
GE 18000	64.1	66.1	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
GE 16000	64.1	66.1	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
GE 14000	64.7	67.4	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
GE 12000	65.1	67.8	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
GE 10000	69.2	72.3	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6
GE 9000	69.7	72.7	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0
GE 8000	72.2	75.3	75.6	75.6	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7	75.7
GE 7000	74.2	77.5	77.8	77.8	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
GE 6000	78.1	81.6	81.9	82.0	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2
GE 5000	81.0	84.6	84.9	85.1	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
GE 4500	81.6	85.4	85.7	85.8	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9	85.9
GE 4000	83.5	87.8	88.2	88.3	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
GE 3500	84.1	88.5	88.8	88.9	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
GE 3000	85.6	90.1	90.4	90.5	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9
GE 2500	86.3	91.0	91.3	91.4	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8
GE 2000	87.2	91.8	92.2	92.3	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
GE 1800	87.5	92.2	92.5	92.6	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0
GE 1500	88.2	92.9	93.2	93.4	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9
GE 1200	88.5	93.9	94.2	94.4	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9
GE 1000	89.0	94.4	94.7	95.2	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
GE 900	89.4	94.7	95.2	95.6	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
GE 800	89.5	94.9	95.4	96.0	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6
GE 700	89.7	95.2	95.7	96.3	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
GE 600	90.1	95.7	96.6	97.3	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
GE 500	90.2	95.8	97.0	97.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
GE 400	90.2	95.9	97.2	98.0	99.2	99.2	99.2	99.2	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
GE 300	90.2	95.9	97.2	98.0	99.5	99.5	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 200	90.2	95.9	97.2	98.0	99.5	99.5	99.5	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	90.2	95.9	97.2	98.0	99.5	99.5	99.5	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 0	90.2	95.9	97.2	98.0	99.5	99.5	99.5	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 70-87  
MONTH: MAY HOURS: 0300-0900

CEILING IN FEET	VISIBILITY IN STATUTE MILES							VISIBILITY IN STATUTE MILES									
	1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	1	56.8	58.1	58.3	58.5	58.6	58.6	58.6	58.6	58.6	58.7	58.7	58.7	58.7	58.7	58.7	58.7
GE 20000	1	61.7	63.2	63.4	63.7	63.8	63.8	63.8	63.8	63.8	63.9	63.9	63.9	63.9	63.9	63.9	64.0
GE 18000	1	61.7	63.2	63.4	63.7	63.8	63.8	63.8	63.8	63.8	63.9	63.9	63.9	63.9	63.9	63.9	64.0
GE 16000	1	61.7	63.2	63.4	63.7	63.8	63.8	63.8	63.8	63.8	63.9	63.9	63.9	63.9	63.9	63.9	64.0
GE 14000	1	62.8	64.5	64.7	64.9	65.1	65.1	65.1	65.1	65.1	65.2	65.2	65.2	65.2	65.2	65.2	65.3
GE 12000	1	63.3	65.1	65.3	65.5	65.6	65.6	65.6	65.6	65.6	65.7	65.7	65.7	65.7	65.7	65.7	65.8
GE 10000	1	67.3	69.2	69.5	69.8	69.9	69.9	69.9	69.9	69.9	70.0	70.0	70.0	70.0	70.0	70.0	70.1
GE 9000	1	67.8	69.8	70.0	70.3	70.4	70.4	70.4	70.4	70.4	70.5	70.5	70.5	70.5	70.5	70.5	70.6
GE 8000	1	71.6	73.7	73.9	74.2	74.3	74.3	74.3	74.3	74.3	74.4	74.4	74.4	74.4	74.4	74.4	74.5
GE 7000	1	73.7	76.0	76.2	76.6	76.7	76.7	76.7	76.7	76.7	76.8	76.8	76.8	76.8	76.8	76.8	76.9
GE 6000	1	76.2	79.0	79.5	79.8	79.9	79.9	79.9	79.9	79.9	80.0	80.0	80.0	80.0	80.0	80.0	80.1
GE 5000	1	79.5	82.5	83.0	83.3	83.4	83.4	83.4	83.4	83.4	83.5	83.5	83.5	83.5	83.5	83.5	83.7
GE 4000	1	80.0	83.2	83.8	84.1	84.2	84.2	84.2	84.2	84.2	84.3	84.3	84.3	84.3	84.3	84.3	84.4
GE 3000	1	81.9	85.4	85.9	86.2	86.5	86.5	86.5	86.5	86.5	86.6	86.6	86.6	86.6	86.6	86.6	86.7
GE 2000	1	82.4	86.1	86.7	87.0	87.2	87.2	87.2	87.2	87.2	87.3	87.3	87.3	87.3	87.3	87.3	87.4
GE 1000	1	84.1	87.8	88.4	88.7	89.0	89.0	89.0	89.1	89.1	89.2	89.2	89.2	89.2	89.2	89.2	89.4
GE 2500	1	84.6	88.5	89.0	89.4	89.7	89.7	89.7	89.8	89.8	89.8	89.9	89.9	89.9	89.9	89.9	90.0
GE 2000	1	85.6	89.8	90.4	90.8	91.1	91.1	91.1	91.2	91.2	91.2	91.3	91.3	91.3	91.3	91.3	91.4
GE 1800	1	86.0	90.2	90.9	91.2	91.5	91.5	91.5	91.6	91.6	91.6	91.7	91.7	91.7	91.7	91.7	91.8
GE 1600	1	86.9	91.3	91.9	92.4	92.7	92.7	92.7	92.8	92.8	92.8	92.9	92.9	92.9	92.9	92.9	93.0
GE 1400	1	87.1	91.8	92.6	93.0	93.3	93.3	93.3	93.4	93.4	93.4	93.5	93.5	93.5	93.5	93.5	93.7
GE 1200	1	87.6	92.5	93.2	93.7	94.0	94.0	94.0	94.1	94.1	94.1	94.2	94.2	94.2	94.2	94.2	94.3
GE 1000	1	87.8	92.8	93.9	94.3	94.6	94.6	94.6	94.7	94.7	94.7	94.8	94.8	94.8	94.8	94.8	94.9
GE 900	1	88.0	92.9	94.1	94.5	94.8	94.8	94.8	94.9	94.9	94.9	95.0	95.0	95.0	95.0	95.0	95.1
GE 800	1	88.2	93.1	94.7	95.2	95.5	95.5	95.5	95.6	95.6	95.6	95.7	95.7	95.7	95.7	95.7	95.8
GE 700	1	88.2	93.1	94.8	95.4	95.7	95.7	95.7	95.8	95.8	95.8	95.9	95.9	95.9	95.9	95.9	96.0
GE 600	1	88.2	93.1	94.8	95.4	95.7	95.7	95.7	95.8	95.8	95.8	95.9	95.9	95.9	95.9	95.9	96.0
GE 500	1	88.3	93.9	95.7	96.6	96.9	97.0	97.4	97.4	97.4	97.4	97.5	97.5	97.5	97.5	97.5	97.7
GE 400	1	88.3	94.1	96.0	97.2	97.7	97.8	98.3	98.3	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.6
GE 300	1	88.3	94.1	96.0	97.2	97.8	98.0	98.4	98.5	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.8
GE 200	1	88.3	94.1	96.0	97.2	97.8	98.0	98.5	98.5	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.8
GE 100	1	88.3	94.1	96.0	97.2	97.8	98.0	98.5	98.5	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.8
GE 0	1	88.3	94.1	96.0	97.2	97.8	98.0	98.5	98.5	98.5	98.6	98.6	98.6	98.6	98.6	98.6	98.8

TOTAL NUMBER OF OBSERVATIONS: 910

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 76-87  
MONTH: MAY HOURS: 0600-0800

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
NO CEIL	57.7	55.4	56.0	56.5	56.7	56.7	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	56.8	57.1
GE 20000	57.6	59.5	60.1	60.5	60.8	60.8	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	61.2
GE 18000	58.1	59.9	60.5	61.0	61.2	61.2	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.6
GE 16000	58.3	60.1	60.8	61.2	61.4	61.4	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.8
GE 14000	58.7	60.6	61.3	61.7	61.9	61.9	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.4
GE 12000	59.5	61.4	62.0	62.5	62.7	62.7	62.8	62.8	62.8	62.8	62.8	62.8	62.8	62.8	62.8	63.1
GE 10000	61.7	66.1	66.9	67.3	67.6	67.6	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	68.1
GE 9000	61.9	66.5	67.2	67.6	68.0	68.0	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.4
GE 8000	68.5	71.8	72.7	73.1	73.4	73.4	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.5	73.9
GE 7000	79.9	76.8	79.8	76.2	76.6	76.6	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	77.0
GE 6000	72.4	76.7	76.2	76.6	76.9	76.9	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.4
GE 5000	74.9	79.7	81.3	81.7	82.0	82.0	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.5
GE 4000	75.7	80.4	82.2	82.6	82.9	82.9	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.3
GE 3000	76.4	82.3	84.1	84.6	84.9	84.9	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.4
GE 2000	77.4	82.8	84.6	85.2	85.5	85.5	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.6	85.9
GE 1800	78.7	84.1	85.9	86.5	86.8	86.8	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.5
GE 1600	79.6	85.1	86.9	87.4	87.7	87.7	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.5
GE 1400	80.5	86.5	88.3	88.8	89.1	89.1	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	90.0
GE 1200	80.8	86.7	88.6	89.4	89.7	89.7	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.5
GE 1000	81.7	87.6	89.5	90.1	90.6	90.6	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.5
GE 900	82.4	88.6	90.8	91.6	91.9	91.9	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.8
GE 800	83.1	89.7	91.8	92.7	93.0	93.0	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.9
GE 700	83.1	90.1	92.3	93.1	93.4	93.4	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.3
GE 600	83.4	90.5	92.7	93.5	93.9	93.9	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.9
GE 500	83.5	90.6	92.8	93.6	94.0	94.0	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	95.0
GE 400	83.9	91.4	93.7	94.6	95.0	95.0	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	96.2
GE 300	84.8	91.8	94.1	95.1	95.5	95.5	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.6
GE 200	84.1	92.0	94.3	95.3	95.7	95.7	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.8
GE 100	84.1	92.8	94.3	95.3	95.7	95.7	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.9
GE 0	84.1	92.8	94.3	95.3	95.7	95.7	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.9

TOTAL NUMBER OF OBSERVATIONS: 910

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS(IST): 0900-1100

CEILING		VISIBILITY IN STATUTE MILES																
IN	FEET	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0	
NO CEIL	53.9	56.2	56.6	56.6	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	
GE 20000	59.5	62.3	62.6	62.6	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	
GE 18000	59.8	62.6	62.9	62.9	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	
GE 16000	59.9	62.6	62.9	62.9	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	
GE 14000	61.3	64.2	64.5	64.5	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9	64.9	
GE 12000	62.0	64.9	65.3	65.3	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	
GE 10000	65.5	68.5	68.8	68.8	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	
GE 9000	65.6	68.7	69.0	69.0	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	
GE 8000	68.7	72.0	72.4	72.4	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	
GE 7000	70.1	74.3	74.7	74.7	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	
GE 6000	70.9	75.4	75.9	76.0	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	
GE 5000	72.2	77.2	77.8	78.2	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	
GE 4000	72.4	77.6	78.3	78.6	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	
GE 3000	74.1	79.8	80.8	81.1	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	
GE 2500	74.9	80.8	81.8	82.2	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.6	
GE 2000	77.0	83.2	84.3	84.6	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	
GE 1500	79.1	85.4	86.5	86.8	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	
GE 1200	81.0	87.5	88.7	89.0	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	
GE 1000	81.1	87.6	88.8	89.4	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	
GE 800	81.8	89.5	90.8	91.4	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	
GE 700	83.2	91.2	92.6	93.3	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	
GE 600	83.8	92.3	94.0	94.7	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	
GE 500	84.3	93.4	95.4	96.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	
GE 400	84.6	93.9	95.8	96.6	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	
GE 300	84.8	94.3	96.2	97.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	
GE 200	85.3	94.8	96.8	97.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	
GE 100	85.5	95.1	97.2	98.0	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	
GE 50	85.6	95.3	97.4	98.3	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	
GE 0	85.6	95.3	97.4	98.3	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	
GE 0	85.6	95.3	97.4	98.4	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	
GE 0	85.6	95.3	97.4	98.4	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS (LST): 1200-1400

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	40.9	52.3	52.3	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7
GE 20000	57.4	61.5	61.5	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
GE 18000	57.5	61.6	61.6	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
GE 16000	57.5	61.6	61.6	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0	62.0
GE 14000	58.5	62.7	62.9	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3
GE 12000	59.1	63.4	63.7	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1
GE 10000	62.3	66.9	67.1	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5
GE 9000	63.2	67.6	68.1	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5	68.5
GE 8000	65.2	70.1	70.3	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8
GE 7000	66.7	71.8	72.0	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5
GE 6000	68.0	73.1	73.3	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8
GE 5000	70.2	75.5	75.7	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
GE 4500	70.4	75.7	75.9	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3
GE 4000	73.4	79.1	79.6	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1
GE 3500	74.7	80.4	80.9	81.4	81.4	81.4	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5	81.5
GE 3000	76.7	84.9	85.5	86.0	86.0	86.0	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1
GE 2500	81.5	88.1	88.8	89.4	89.4	89.4	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5	89.5
GE 2000	83.0	90.0	91.0	91.5	91.6	91.6	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7
GE 1800	83.1	90.1	91.1	91.6	91.7	91.7	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8
GE 1600	83.8	91.0	92.4	92.9	93.2	93.2	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
GE 1200	85.7	93.3	94.8	95.4	95.7	95.7	95.8	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9
GE 1000	86.1	94.3	95.8	96.3	96.7	96.7	96.8	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
GE 900	86.2	94.9	96.6	97.2	97.5	97.5	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
GE 800	86.7	95.4	97.0	97.6	98.1	98.1	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
GE 700	86.8	95.7	97.3	98.2	98.7	98.7	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
GE 600	87.0	95.9	97.5	98.4	98.9	98.9	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
GE 500	87.0	95.9	97.5	98.5	99.0	99.0	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
GE 400	87.0	96.0	97.8	98.8	99.4	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 300	87.0	96.0	97.8	98.8	99.4	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 200	87.0	96.0	97.8	98.8	99.4	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	87.0	96.0	97.8	98.8	99.4	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 0	87.0	96.0	97.8	98.8	99.4	99.7	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS/SLST: 1500-1700

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	1	1 1/2	2	2 1/2	3	4	5	6	7	8	9	10	11	12	13	14
NO CEIL	95.0	98.0	98.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
GE 20000	55.3	58.9	58.9	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
GE 18000	55.6	59.2	59.2	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9
GE 16000	55.6	59.2	59.2	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9
GE 14000	56.5	60.1	60.1	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9	60.9
GE 12000	57.2	61.1	61.1	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8
GE 10000	61.0	65.4	65.4	66.1	66.1	66.1	66.1	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2
GE 9000	61.7	66.1	66.1	66.9	66.9	66.9	66.9	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0
GE 8000	65.2	69.8	69.8	70.5	70.5	70.5	70.5	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6
GE 7000	66.5	71.1	71.1	71.8	71.8	71.8	71.8	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9
GE 6000	68.0	73.0	73.0	73.8	73.8	73.8	73.8	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9
GE 5000	71.0	77.5	77.5	78.3	78.3	78.3	78.3	78.4	78.5	78.5	78.6	78.6	78.6	78.6	78.6	78.6
GE 4500	72.7	78.4	78.4	79.1	79.1	79.1	79.1	79.2	79.4	79.4	79.5	79.5	79.5	79.5	79.5	79.5
GE 4000	76.6	82.5	82.5	83.4	83.4	83.4	83.4	83.5	83.7	83.7	83.8	83.8	83.8	83.8	83.8	83.8
GE 3500	77.6	83.9	83.9	84.9	84.9	84.9	84.9	85.1	85.2	85.2	85.3	85.3	85.3	85.3	85.3	85.3
GE 3000	81.2	87.7	87.7	88.9	88.9	88.9	88.9	89.1	89.2	89.2	89.4	89.4	89.4	89.4	89.4	89.4
GE 2500	83.3	90.3	90.3	91.5	91.5	91.5	91.5	91.6	91.9	91.9	92.0	92.0	92.0	92.2	92.2	92.2
GE 2000	84.6	91.8	91.8	93.1	93.1	93.1	93.1	93.2	93.6	93.6	93.7	93.7	93.7	93.8	93.8	93.8
GE 1800	84.7	91.9	91.9	93.2	93.2	93.2	93.2	93.3	93.5	93.5	93.7	93.7	93.8	93.9	93.9	93.9
GE 1500	84.9	92.4	92.4	93.9	93.9	93.9	93.9	94.1	94.3	94.3	94.5	94.5	94.6	94.7	94.7	94.7
GE 1200	86.5	94.1	94.1	95.6	95.6	95.6	95.6	95.8	96.0	96.2	96.2	96.3	96.3	96.5	96.5	96.5
GE 1000	86.9	94.9	94.9	96.5	96.5	96.5	96.5	96.7	96.9	97.1	97.1	97.2	97.2	97.3	97.3	97.3
GE 900	86.9	95.2	95.2	96.8	96.8	96.8	96.8	97.2	97.4	97.6	97.6	97.7	97.7	97.8	97.8	97.8
GE 800	87.2	95.6	95.6	97.2	97.2	97.2	97.2	97.6	97.8	98.1	98.1	98.2	98.2	98.3	98.3	98.3
GE 700	87.2	95.6	95.6	97.2	97.2	97.2	97.2	97.6	97.8	98.1	98.1	98.2	98.2	98.3	98.3	98.3
GE 600	87.2	95.7	95.7	97.3	97.3	97.3	97.3	97.6	97.8	98.1	98.1	98.2	98.2	98.3	98.3	98.3
GE 500	87.2	95.7	95.7	97.3	97.3	97.3	97.3	97.6	97.8	98.1	98.1	98.2	98.2	98.3	98.3	98.3
GE 400	87.2	95.7	95.7	97.3	97.3	97.3	97.3	97.6	97.8	98.1	98.1	98.2	98.2	98.3	98.3	98.3
GE 300	87.2	95.7	95.7	97.3	97.3	97.3	97.3	97.6	97.8	98.1	98.1	98.2	98.2	98.3	98.3	98.3
GE 200	87.2	95.7	95.7	97.3	97.3	97.3	97.3	97.6	97.8	98.1	98.1	98.2	98.2	98.3	98.3	98.3
GE 100	87.2	95.7	95.7	97.3	97.3	97.3	97.3	97.6	97.8	98.1	98.1	98.2	98.2	98.3	98.3	98.3
GE 01	87.2	95.7	95.7	97.3	97.3	97.3	97.3	97.6	97.8	98.1	98.1	98.2	98.2	98.3	98.3	98.3

TOTAL NUMBER OF OBSERVATIONS: 930



GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS/SET: 1800-2000

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	1	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5	5 1/2	6	6 1/2	7	7 1/2	8	8 1/2
NO CEIL	50.0	53.7	54.0	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5
GE 2000	50.0	52.0	52.0	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4
GE 1800	50.0	52.0	52.0	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4
GE 1600	50.0	52.0	52.0	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4
GE 1400	50.0	52.0	52.0	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4	51.4
GE 1200	51.1	55.2	55.5	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0
GE 1000	64.7	68.9	69.2	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8
GE 900	64.7	68.9	69.2	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8
GE 800	69.5	73.0	74.1	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6
GE 700	71.1	75.5	75.8	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3
GE 600	72.6	77.0	78.1	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6
GE 500	76.1	81.0	82.3	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8
GE 400	77.2	82.9	83.3	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
GE 300	80.2	86.6	87.2	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7
GE 200	81.1	87.6	88.4	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9
GE 100	81.2	82.0	81.0	81.6	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0
GE 2500	85.2	91.9	92.9	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5
GE 2000	85.7	92.9	93.9	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5
GE 1800	85.7	93.0	94.0	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
GE 1600	86.2	93.0	94.7	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
GE 1400	86.7	94.4	95.4	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
GE 1200	86.7	94.9	96.3	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
GE 1000	86.7	95.2	96.6	97.2	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5
GE 900	86.7	95.3	96.7	97.3	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
GE 800	86.7	95.3	96.7	97.3	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
GE 700	86.7	95.3	96.7	97.3	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
GE 600	86.9	95.7	97.2	97.8	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
GE 500	86.9	95.9	97.4	98.2	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
GE 400	86.9	96.0	97.5	98.3	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
GE 300	86.9	96.0	97.5	98.3	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
GE 200	86.9	96.0	97.5	98.3	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
GE 100	86.9	96.0	97.5	98.3	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
GE 0	86.9	96.0	97.5	98.3	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4

TOTAL NUMBER OF OBSERVATIONS: 936

GLOBAL CLIMATOLOGY BRANCH  
USAF/CIAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 72575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS: 1500-2300

CEILING		VISIBILITY IN STATUTE MILES															
IN	FEET	1	1/4	1/2	3/4	1	1 1/4	1 1/2	2	3	4	5	6	7	8	9	10
NO CEIL	50.0	61.5	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0
GE 2000	64.2	67.2	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5
GE 1800	64.3	67.3	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6
GE 1600	64.3	67.3	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6
GE 1400	64.0	68.5	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
GE 1200	66.4	69.0	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1
GE 1000	68.0	72.3	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6
GE 900	69.4	72.0	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1
GE 800	71.4	77.0	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
GE 700	76.7	78.2	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5
GE 600	77.4	81.5	81.9	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0
GE 500	81.2	85.3	85.7	85.8	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0
GE 400	82.2	86.2	86.7	86.8	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0
GE 300	84.7	88.9	89.4	89.5	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7	89.7
GE 200	85.5	89.7	90.1	90.2	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4	90.4
GE 100	86.7	90.9	91.3	91.5	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3
GE 2500	87.7	91.1	92.5	92.7	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4
GE 2000	89.5	93.8	94.2	94.4	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
GE 1800	89.6	93.9	94.3	94.5	95.1	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
GE 1600	89.7	94.0	94.4	94.6	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
GE 1400	89.7	94.0	94.4	94.6	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
GE 1200	89.7	94.0	94.4	94.6	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
GE 1000	89.9	95.4	96.0	96.2	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
GE 900	90.0	95.5	96.1	96.3	97.1	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
GE 800	90.1	95.6	96.2	96.5	97.2	97.2	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 700	90.2	95.7	96.3	96.6	97.3	97.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
GE 600	90.2	96.0	96.7	97.0	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
GE 500	90.2	96.1	97.2	97.6	98.8	98.8	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
GE 400	90.2	96.5	97.5	98.1	99.4	99.4	99.5	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
GE 300	90.2	96.5	97.5	98.1	99.4	99.4	99.5	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
GE 200	90.2	96.5	97.5	98.1	99.4	99.4	99.5	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	90.2	96.5	97.5	98.1	99.4	99.4	99.5	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE	GI	90.2	96.5	97.5	98.1	99.4	99.5	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS(IST): ALL

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	53.6	56.0	56.3	56.5	56.6	56.6	56.6	56.6	56.6	56.7	56.7	56.7	56.7	56.7	56.7	56.7
GE 20000	59.8	62.7	62.9	63.2	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.4	63.4
GE 18000	60.0	62.8	63.1	63.4	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.6
GE 16000	60.0	62.8	63.1	63.4	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.6
GE 14000	61.0	64.0	64.3	64.6	64.7	64.7	64.7	64.7	64.7	64.8	64.8	64.8	64.8	64.8	64.8	64.8
GE 12000	61.7	64.8	65.1	65.4	65.5	65.5	65.5	65.5	65.5	65.6	65.6	65.6	65.6	65.6	65.6	65.6
GE 10000	65.3	68.7	69.0	69.3	69.4	69.4	69.4	69.4	69.4	69.5	69.5	69.5	69.5	69.5	69.5	69.5
GE 9000	65.8	69.2	69.5	69.8	69.9	69.9	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.1
GE 8000	69.3	72.9	73.3	73.6	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.8	73.8
GE 7000	71.0	74.9	75.3	75.6	75.7	75.7	75.7	75.7	75.7	75.8	75.8	75.8	75.8	75.8	75.8	75.8
GE 6000	72.9	77.3	77.8	78.1	78.2	78.2	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3
GE 5000	75.9	80.5	81.0	81.4	81.6	81.6	81.6	81.6	81.6	81.7	81.7	81.7	81.7	81.7	81.7	81.7
GE 4500	76.5	81.2	81.8	82.2	82.3	82.3	82.3	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4
GE 4000	78.9	84.0	84.7	85.1	85.3	85.3	85.3	85.3	85.3	85.4	85.4	85.4	85.4	85.4	85.4	85.4
GE 3500	79.7	85.0	85.7	86.1	86.3	86.3	86.3	86.3	86.3	86.4	86.4	86.4	86.4	86.4	86.4	86.4
GE 3000	81.9	87.4	88.1	88.5	88.9	88.9	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.1
GE 2500	83.4	89.0	89.8	90.3	90.6	90.6	90.7	90.7	90.7	90.7	90.7	90.7	90.8	90.8	90.8	90.8
GE 2000	84.6	90.5	91.3	91.8	92.1	92.1	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.3	92.4
GE 1800	84.8	90.7	91.5	92.1	92.4	92.4	92.5	92.5	92.5	92.6	92.6	92.6	92.6	92.6	92.6	92.6
GE 1500	85.4	91.5	92.5	93.0	93.4	93.4	93.5	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.7
GE 1200	86.2	92.7	93.8	94.3	94.7	94.7	94.9	94.9	94.9	94.9	94.9	94.9	95.0	95.0	95.0	95.0
GE 1000	86.6	93.5	94.7	95.3	95.7	95.7	95.8	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	96.0
GE 900	86.8	94.0	95.2	95.8	96.3	96.3	96.5	96.5	96.5	96.5	96.5	96.5	96.6	96.6	96.6	96.6
GE 800	87.0	94.3	95.5	96.2	96.7	96.7	96.9	96.9	96.9	96.9	96.9	96.9	97.0	97.0	97.0	97.0
GE 700	87.1	94.4	95.7	96.5	97.1	97.1	97.3	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.5
GE 600	87.3	94.8	96.2	96.9	97.6	97.6	97.9	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.1
GE 500	87.4	95.0	96.5	97.4	98.2	98.3	98.4	98.8	98.8	98.8	98.8	98.8	98.8	98.9	98.9	98.9
GE 400	87.4	95.2	96.8	97.7	98.7	98.9	99.1	99.4	99.4	99.4	99.4	99.4	99.5	99.5	99.5	99.6
GE 300	87.4	95.2	96.8	97.7	98.7	98.9	99.2	99.5	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.7
GE 200	87.4	95.2	96.8	97.8	98.8	99.0	99.3	99.7	99.7	99.8	99.8	99.8	99.8	99.9	99.9	100.0
GE 100	87.4	95.2	96.8	97.8	98.8	99.0	99.3	99.7	99.7	99.8	99.8	99.8	99.9	99.9	100.0	100.0
GE	CI 87.4	95.2	96.8	97.8	98.8	99.0	99.3	99.7	99.7	99.8	99.8	99.8	99.9	99.9	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 7440

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS(IST): 0000-0200

CEILING		VISIBILITY IN STATUTE MILES															
IN FEET		GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL		61.7	62.3	62.8	62.9	62.9	62.9	62.9	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1
GE 20000		66.6	67.4	67.9	68.0	68.0	68.0	68.0	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
GE 18000		66.6	67.4	67.9	68.0	68.0	68.0	68.0	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
GE 16000		66.6	67.4	67.9	68.0	68.0	68.0	68.0	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
GE 14000		67.7	68.6	69.0	69.1	69.1	69.1	69.1	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3
GE 12000		67.8	68.7	69.1	69.2	69.2	69.2	69.2	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4
GE 10000		72.4	73.7	74.2	74.3	74.3	74.3	74.3	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6	74.6
GE 9000		72.6	73.8	74.3	74.4	74.4	74.4	74.4	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
GE 8000		76.1	77.7	78.2	78.3	78.3	78.3	78.3	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6
GE 7000		77.7	79.2	79.8	79.9	79.9	79.9	79.9	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1
GE 6000		82.0	84.1	84.7	84.8	84.8	84.8	84.8	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0
GE 5000		87.1	89.4	90.1	90.2	90.3	90.3	90.3	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6
GE 4500		87.4	89.8	90.4	90.6	90.7	90.7	90.7	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9	90.9
GE 4000		89.6	92.1	92.8	92.9	93.0	93.0	93.0	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.2
GE 3500		89.9	92.4	93.1	93.2	93.3	93.3	93.3	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
GE 3000		90.8	93.7	94.4	94.6	94.7	94.7	94.7	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9
GE 2500		91.2	94.2	95.0	95.1	95.2	95.2	95.2	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
GE 2000		92.0	95.1	95.9	96.0	96.1	96.1	96.1	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3
GE 1800		92.0	95.1	95.9	96.0	96.1	96.1	96.1	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3
GE 1500		92.1	95.3	96.1	96.2	96.3	96.3	96.3	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6
GE 1200		93.2	96.4	97.2	97.3	97.4	97.4	97.4	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
GE 1000		93.2	96.7	97.6	97.7	97.8	97.8	97.8	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
GE 900		93.2	96.8	97.7	98.0	98.1	98.1	98.1	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
GE 800		93.2	96.8	97.7	98.0	98.1	98.1	98.1	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
GE 700		93.2	96.9	97.8	98.1	98.2	98.4	98.6	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
GE 600		93.2	97.0	97.9	98.2	98.3	98.6	98.7	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
GE 500		93.2	97.2	98.1	98.4	98.6	98.8	98.9	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
GE 400		93.2	97.3	98.3	98.7	98.9	99.1	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
GE 300		93.2	97.3	98.3	98.9	99.1	99.3	99.4	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 200		93.2	97.3	98.3	98.9	99.1	99.3	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
GE 100		93.2	97.3	98.3	98.9	99.1	99.3	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
GE 0		93.2	97.3	98.3	98.9	99.1	99.3	99.6	99.8	99.8	99.8	99.8	99.8	99.8	99.8	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS(IST): 0300-0500

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	54.9	55.7	55.9	56.1	56.8	56.8	57.0	57.0	57.1	57.2	57.2	57.2	57.2	57.2	57.2	57.2
GE 20000	61.1	62.0	62.2	62.4	63.1	63.1	63.3	63.3	63.4	63.6	63.6	63.6	63.6	63.7	63.7	63.7
GE 18000	61.1	62.0	62.2	62.4	63.1	63.1	63.3	63.3	63.4	63.6	63.6	63.6	63.6	63.7	63.7	63.7
GE 16000	61.2	62.1	62.3	62.6	63.2	63.2	63.4	63.4	63.6	63.7	63.7	63.7	63.7	63.8	63.8	63.8
GE 14000	62.2	63.2	63.4	63.7	64.3	64.3	64.6	64.6	64.7	64.8	64.8	64.8	64.8	64.9	64.9	64.9
GE 12000	63.7	64.7	64.9	65.1	65.8	65.8	66.0	66.0	66.1	66.2	66.2	66.2	66.2	66.3	66.3	66.3
GE 10000	69.0	70.3	70.7	71.0	71.7	71.7	71.9	71.9	72.0	72.1	72.1	72.1	72.1	72.2	72.2	72.2
GE 9000	69.1	70.4	70.8	71.1	71.8	71.8	72.0	72.0	72.1	72.2	72.2	72.2	72.2	72.3	72.3	72.3
GE 8000	72.9	74.4	74.9	75.4	76.2	76.2	76.4	76.4	76.6	76.7	76.7	76.7	76.7	76.8	76.8	76.8
GE 7000	74.4	76.0	76.4	77.0	77.8	77.8	78.0	78.0	78.1	78.2	78.2	78.2	78.2	78.3	78.3	78.3
GE 6000	78.2	80.1	80.6	81.1	82.0	82.0	82.2	82.2	82.3	82.4	82.4	82.4	82.4	82.6	82.6	82.6
GE 5000	82.7	84.9	85.4	86.0	86.9	86.9	87.1	87.1	87.2	87.3	87.3	87.3	87.3	87.4	87.4	87.4
GE 4500	83.1	85.4	86.0	86.6	87.4	87.4	87.7	87.7	87.8	87.9	87.9	87.9	87.9	88.0	88.0	88.0
GE 4000	85.7	88.4	89.1	89.8	90.8	90.8	91.0	91.0	91.1	91.2	91.2	91.2	91.2	91.3	91.3	91.3
GE 3500	86.0	88.8	89.4	90.1	91.1	91.1	91.3	91.3	91.4	91.6	91.6	91.6	91.6	91.7	91.7	91.7
GE 3000	87.2	90.3	91.0	91.7	92.7	92.7	92.9	92.9	93.0	93.1	93.1	93.1	93.1	93.2	93.2	93.3
GE 2500	88.0	91.3	92.1	92.8	93.8	93.8	94.0	94.0	94.1	94.2	94.2	94.2	94.2	94.3	94.3	94.4
GE 2000	88.6	91.9	92.7	93.4	94.4	94.4	94.7	94.7	94.8	94.9	94.9	94.9	94.9	95.0	95.0	95.1
GE 1800	88.8	92.2	93.0	93.8	94.8	94.8	95.0	95.0	95.1	95.2	95.2	95.2	95.2	95.3	95.3	95.4
GE 1500	89.3	92.8	93.6	94.3	95.3	95.3	95.6	95.6	95.7	95.8	95.8	95.8	95.8	95.9	95.9	96.0
GE 1200	89.9	93.8	94.7	95.4	96.4	96.4	96.7	96.7	96.8	96.9	96.9	96.9	96.9	97.0	97.0	97.1
GE 1000	89.9	93.8	94.8	95.7	96.8	96.8	97.0	97.0	97.1	97.2	97.2	97.2	97.2	97.3	97.3	97.4
GE 900	89.9	93.8	94.9	95.9	97.1	97.1	97.3	97.3	97.4	97.6	97.6	97.6	97.6	97.7	97.7	97.8
GE 800	89.9	93.8	94.9	95.9	97.2	97.2	97.4	97.4	97.6	97.7	97.7	97.7	97.7	97.8	97.8	97.9
GE 700	90.1	94.0	95.2	96.2	97.6	97.6	97.8	97.8	97.9	98.0	98.0	98.0	98.0	98.1	98.1	98.2
GE 600	90.3	94.0	95.2	96.2	97.6	97.6	97.8	97.8	97.9	98.0	98.0	98.0	98.0	98.1	98.1	98.2
GE 500	90.1	94.0	95.3	96.3	97.8	97.8	98.0	98.0	98.1	98.2	98.2	98.2	98.2	98.3	98.3	98.4
GE 400	90.1	94.1	95.6	96.6	98.1	98.1	98.3	98.3	98.4	98.6	98.6	98.6	98.6	98.7	98.7	98.8
GE 300	90.1	94.2	95.7	96.7	98.2	98.2	98.4	98.4	98.6	98.7	98.7	98.7	98.7	98.9	98.9	99.1
GE 200	90.1	94.2	95.7	96.7	98.2	98.2	98.6	98.6	98.7	98.8	98.8	98.8	98.8	99.1	99.1	99.7
GE 100	90.1	94.2	95.7	96.7	98.2	98.2	98.6	98.6	98.7	98.8	98.8	98.8	98.8	99.1	99.1	99.9
GE 0	90.1	94.2	95.7	96.7	98.2	98.2	98.6	98.6	98.7	98.8	98.8	98.8	98.8	99.1	99.1	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS: 0600-0800

CEILING		VISIBILITY IN STATUTE MILES																
IN	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE		
FEET	1	10	6	5	4	3	2	1 1/2	2	1 1/2	1 1/4	1	3/4	5/8	1/2	5/16	1/4	0
NO CEIL	54.3	54.8	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.2	55.3
GE 25000	60.1	61.0	61.3	61.4	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.7	61.8
GE 18000	60.1	61.0	61.3	61.4	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.6	61.7	61.8
GE 16000	60.2	61.1	61.4	61.6	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.7	61.8	61.9
GE 14000	62.3	63.4	63.8	64.1	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.3	64.4
GE 12000	64.1	65.2	65.6	65.9	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.1	66.2
GE 10000	69.1	70.4	70.8	71.2	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.4	71.6
GE 9000	69.7	71.1	71.4	71.9	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.1	72.2
GE 8000	74.1	75.8	76.2	76.8	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	77.0	77.1
GE 7000	75.2	77.1	77.6	78.1	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.3	78.4
GE 6000	77.6	79.4	80.0	80.6	80.7	80.7	80.7	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.9	81.0
GE 5000	79.6	82.3	82.9	83.4	83.7	83.7	83.7	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.9	84.0
GE 4500	79.6	82.6	83.1	83.7	83.9	83.9	83.9	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.1	84.2
GE 4000	81.3	84.6	85.2	85.8	86.0	86.0	86.0	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.3	86.4
GE 3500	81.6	84.8	85.4	86.0	86.2	86.2	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.6	86.7
GE 3000	83.2	86.8	87.4	88.0	88.3	88.3	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.7	88.8
GE 2500	84.8	88.4	89.1	89.7	90.0	90.0	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.4	90.6
GE 2000	85.9	90.2	91.0	91.8	92.2	92.2	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.7	92.8
GE 1800	86.0	90.4	91.2	92.0	92.4	92.4	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.9	93.0
GE 1500	87.0	91.6	92.3	93.1	93.7	93.7	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	94.1	94.2
GE 1200	87.6	92.2	93.0	93.9	94.8	94.8	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.2	95.3
GE 1000	87.6	92.3	93.1	94.0	95.0	95.0	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.4	95.6
GE 900	87.6	92.7	93.4	94.4	95.6	95.6	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	96.0	96.1
GE 800	87.7	93.1	93.9	94.9	96.2	96.3	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.8	96.9
GE 700	87.8	93.3	94.2	95.6	97.1	97.2	97.4	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.8	97.9
GE 600	87.8	93.3	94.3	95.7	97.3	97.4	97.7	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	98.0	98.1
GE 500	88.0	93.8	94.8	96.1	97.8	98.0	98.3	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.7	98.8
GE 400	88.0	93.8	94.8	96.2	98.0	98.3	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	99.0	99.1
GE 300	88.0	93.8	94.8	96.2	98.2	98.6	99.0	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.4	99.6
GE 200	88.0	93.8	94.8	96.3	98.3	98.7	99.1	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.9	100.0
GE 100	88.0	93.8	94.8	96.3	98.3	98.7	99.1	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.9	100.0
GE 0	88.0	93.8	94.8	96.3	98.3	98.7	99.1	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS: 950

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM JOINTLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 70-87  
MONTH: JUN HOUR(S): 1500-1800

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
NO CEIL	54.6	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2
GE 20000	63.2	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
GE 18000	63.2	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
GE 16000	63.3	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
GE 14000	64.6	65.3	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4
GE 12000	65.9	66.9	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0
GE 10000	69.7	70.9	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
GE 9000	70.1	71.3	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4
GE 8000	72.0	74.3	74.7	74.8	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9
GE 7000	74.3	76.4	76.9	77.0	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
GE 6000	76.3	78.6	79.3	79.4	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6
GE 5000	77.7	80.7	81.4	81.7	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9	81.9
GE 4500	77.8	80.9	81.8	82.3	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
GE 4000	79.4	83.2	84.1	84.3	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6
GE 3500	79.7	83.4	84.3	84.6	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8
GE 3000	81.0	85.0	86.1	86.3	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 2500	82.9	87.1	88.2	88.4	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
GE 2000	84.6	88.9	89.8	90.6	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
GE 1800	84.9	89.4	90.4	91.1	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
GE 1500	86.9	91.7	92.8	93.4	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7
GE 1200	88.3	93.4	94.6	95.3	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
GE 1000	89.3	93.8	95.0	96.0	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4
GE 900	88.9	94.8	96.8	97.0	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
GE 800	88.9	94.9	96.1	97.1	97.7	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
GE 700	89.0	95.2	96.4	97.4	98.1	98.2	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
GE 600	89.0	95.4	96.8	98.0	98.9	99.0	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
GE 500	89.8	95.9	97.2	98.4	99.3	99.4	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
GE 400	89.8	96.0	97.3	98.6	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 300	89.8	96.0	97.3	98.6	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 200	89.8	96.0	97.3	98.6	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	89.8	96.0	97.3	98.6	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE C	89.8	96.0	97.3	98.6	99.4	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 960

NATIONAL METEOROLOGICAL SERVICE  
 METEOROLOGICAL  
 AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
 FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
 MONTH: JUN HOURS(LST): 1200-1400

CEILING IN FEET	VISIBILITY IN STATUTE MILES																	
	1	3/4	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE	GE
	1	3/4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
50	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
40	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
30	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6	62.6
20	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7
10	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7
0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0	65.0
50	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3	70.3
40	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2
30	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
20	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
10	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4	78.4
0	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2
50	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
40	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
30	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
20	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9
10	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
0	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
50	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
40	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3
30	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
20	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
10	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
0	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
50	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
40	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
30	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
20	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
50	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
40	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
30	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
20	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 900



AD-A187 845

GRAND FORKS AIR FORCE BASE NORTH DAKOTA REVISED UNIFORM

3/4

SUMMARY OF SURFAC. (H) AIR FORCE ENVIRONMENTAL

TECHNICAL APPLICATIONS CENTER SCOTT A.. NOV 87

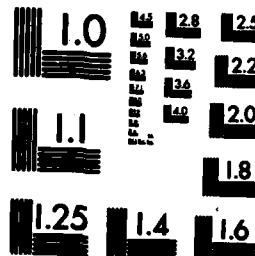
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F/G 4/2

NL





MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS(LST): 1500-1700

CEILING IN FEET	VISIBILITY IN STATUTE MILES														
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2	GE 1 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16
NO CEIL	56.6	58.1	58.1	58.1	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4	58.4
GE 20000	65.7	67.7	67.8	67.8	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1
GE 18000	65.8	67.8	67.9	67.9	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2	68.2
GE 16000	66.2	68.2	68.3	68.3	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
GE 14000	67.0	69.0	69.1	69.1	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4
GE 12000	68.3	70.3	70.4	70.4	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8
GE 10000	73.3	75.4	75.6	75.6	75.9	75.9	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
GE 9000	74.4	76.6	76.7	76.7	77.0	77.0	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
GE 8000	77.6	80.3	80.4	80.4	80.8	80.8	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9	80.9
GE 7000	79.3	82.2	82.3	82.3	82.7	82.7	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8
GE 6000	80.1	83.1	83.2	83.2	83.6	83.6	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7
GE 5000	82.7	86.0	86.1	86.1	86.4	86.4	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 4500	83.3	86.7	86.8	86.8	87.1	87.1	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2
GE 4000	85.0	88.6	88.8	88.8	89.1	89.1	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2
GE 3500	86.1	89.7	89.9	89.9	90.2	90.2	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.3
GE 3000	87.7	91.8	92.3	92.3	92.7	92.7	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8
GE 2500	89.2	93.8	94.3	94.3	94.7	94.7	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
GE 2000	90.2	95.0	95.9	95.9	96.4	96.4	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6	96.6
GE 1800	90.3	95.1	96.0	96.0	96.6	96.6	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 1500	91.0	95.9	97.0	97.0	97.6	97.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
GE 1200	91.0	96.0	97.1	97.2	97.8	97.8	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9
GE 1000	91.0	96.2	97.6	97.7	98.2	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3	98.3
GE 900	91.1	96.4	97.8	97.9	98.4	98.4	98.6	98.7	98.7	98.8	98.8	98.8	98.8	98.8	98.8
GE 800	91.1	96.6	98.0	98.1	98.7	98.7	98.9	98.9	98.9	99.0	99.1	99.1	99.1	99.1	99.1
GE 700	91.1	96.6	98.0	98.4	99.0	99.1	99.2	99.2	99.3	99.4	99.4	99.4	99.4	99.4	99.4
GE 600	91.1	96.6	98.0	98.4	99.0	99.2	99.3	99.3	99.4	99.6	99.6	99.6	99.6	99.6	99.6
GE 500	91.1	96.6	98.2	98.7	99.2	99.4	99.6	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.8
GE 400	91.1	96.7	98.3	98.8	99.3	99.6	99.7	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9
GE 300	91.1	96.7	98.3	98.8	99.4	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE 200	91.1	96.7	98.3	98.8	99.4	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	91.1	96.7	98.3	98.8	99.4	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE 01	91.1	96.7	98.3	98.8	99.4	99.7	99.8	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS(LST): 1800-2000

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 1/8
NO CEIL	57.0	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.7	58.7	58.7	58.7	58.7	58.7	58.7
GE 20000	67.2	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.1	69.1	69.1	69.1	69.1	69.1	69.1
GE 18000	67.4	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.2	69.3	69.3	69.3	69.3	69.3	69.3	69.3
GE 16000	67.6	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.3	69.4	69.4	69.4	69.4	69.4	69.4	69.4
GE 14000	70.2	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.1	72.1	72.1	72.1	72.1	72.1	72.1
GE 12000	71.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.2	73.3	73.3	73.3	73.3	73.3	73.3	73.3
GE 10000	76.1	78.1	78.1	78.2	78.2	78.2	78.2	78.2	78.2	78.3	78.3	78.3	78.3	78.3	78.3	78.3
GE 9000	77.2	79.3	79.3	79.4	79.4	79.4	79.4	79.4	79.4	79.6	79.6	79.6	79.6	79.6	79.6	79.6
GE 8000	81.4	83.6	83.6	83.8	83.8	83.8	83.8	83.8	83.8	83.9	83.9	83.9	83.9	83.9	83.9	83.9
GE 7000	82.7	84.8	84.8	85.0	85.0	85.0	85.0	85.0	85.0	85.1	85.1	85.1	85.1	85.1	85.1	85.1
GE 6000	83.9	86.1	86.1	86.3	86.3	86.3	86.3	86.3	86.3	86.4	86.4	86.4	86.4	86.4	86.4	86.4
GE 5000	86.2	88.7	88.7	88.9	88.9	88.9	88.9	88.9	88.9	89.0	89.0	89.0	89.0	89.0	89.0	89.0
GE 4500	87.2	89.7	89.7	89.9	89.9	89.9	89.9	89.9	89.9	90.0	90.0	90.0	90.0	90.0	90.0	90.0
GE 4000	88.8	91.4	91.4	91.7	91.7	91.7	91.7	91.7	91.7	91.8	91.8	91.8	91.8	91.8	91.8	91.8
GE 3500	89.4	92.2	92.2	92.4	92.4	92.4	92.4	92.4	92.4	92.6	92.6	92.6	92.6	92.6	92.6	92.6
GE 3000	91.3	94.7	94.7	94.9	94.9	94.9	94.9	94.9	94.9	95.0	95.0	95.0	95.0	95.0	95.0	95.0
GE 2500	91.7	95.4	95.4	95.8	95.8	95.8	95.8	95.8	95.8	95.9	95.9	95.9	95.9	95.9	95.9	95.9
GE 2000	92.3	96.3	96.3	96.8	96.8	96.8	96.8	96.8	96.8	96.9	96.9	96.9	96.9	96.9	96.9	96.9
GE 1800	92.3	96.3	96.4	96.8	96.8	96.8	96.8	96.8	96.8	96.9	96.9	96.9	96.9	96.9	96.9	96.9
GE 1500	93.0	97.0	97.1	97.4	97.4	97.4	97.4	97.4	97.4	97.6	97.6	97.6	97.6	97.6	97.6	97.6
GE 1200	93.1	97.2	97.7	98.1	98.1	98.1	98.1	98.1	98.1	98.3	98.4	98.4	98.4	98.4	98.4	98.4
GE 1000	93.2	97.4	97.9	98.3	98.4	98.4	98.4	98.4	98.4	98.7	98.8	98.8	98.8	98.8	98.8	98.8
GE 900	93.3	97.7	98.3	98.6	98.9	99.1	99.1	99.1	99.1	99.3	99.4	99.4	99.4	99.4	99.4	99.4
GE 800	93.4	97.8	98.4	98.9	99.0	99.2	99.2	99.2	99.2	99.4	99.6	99.6	99.6	99.6	99.6	99.6
GE 700	93.4	97.9	98.6	99.0	99.1	99.3	99.3	99.3	99.3	99.6	99.7	99.7	99.7	99.7	99.7	99.7
GE 600	93.4	97.9	98.6	99.0	99.1	99.3	99.3	99.3	99.3	99.6	99.7	99.7	99.7	99.7	99.7	99.7
GE 500	93.4	97.9	98.7	99.1	99.3	99.6	99.6	99.6	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9
GE 400	93.4	97.9	98.7	99.1	99.3	99.7	99.7	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE 300	93.4	97.9	98.7	99.1	99.3	99.7	99.7	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE 200	93.4	97.9	98.7	99.1	99.3	99.7	99.7	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	93.4	97.9	98.7	99.1	99.3	99.7	99.7	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE 0	93.4	97.9	98.7	99.1	99.3	99.7	99.7	99.7	99.7	99.9	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS(IST): 2100-2300

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE
NO CEIL	61.1	61.8	62.0	62.2	62.3	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4
GE 20000	67.0	68.0	68.2	68.4	68.6	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
GE 18000	67.2	68.2	68.4	68.7	68.8	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9
GE 16000	67.2	68.2	68.4	68.7	68.8	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9
GE 14000	69.0	70.0	70.2	70.4	70.6	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7
GE 12000	69.9	70.9	71.1	71.3	71.4	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
GE 10000	74.3	75.3	75.6	75.8	75.9	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
GE 9000	74.8	75.8	76.0	76.2	76.3	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4
GE 8000	79.2	80.6	80.8	81.0	81.1	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2	81.2
GE 7000	80.2	81.6	81.8	82.0	82.1	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2	82.2
GE 6000	82.8	84.9	85.2	85.6	85.7	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8	85.8
GE 5000	86.1	88.2	88.6	89.1	89.2	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
GE 4500	86.3	88.4	88.8	89.3	89.4	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6
GE 4000	88.2	90.7	91.0	91.6	91.7	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8
GE 3500	89.2	91.7	92.0	92.6	92.7	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8
GE 3000	90.4	93.4	93.8	94.3	94.4	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6	94.6
GE 2500	91.4	94.6	94.9	95.4	95.6	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.7
GE 2000	92.2	95.3	95.7	96.2	96.3	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4
GE 1800	92.2	95.3	95.7	96.2	96.3	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4
GE 1500	92.6	95.9	96.4	97.0	97.2	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 1200	92.9	96.4	97.0	97.7	98.0	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
GE 1000	93.0	97.0	97.6	98.2	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
GE 900	93.0	97.0	97.7	98.3	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
GE 800	93.0	97.2	97.9	98.6	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
GE 700	93.0	97.2	98.0	98.8	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 600	93.0	97.2	98.0	98.8	99.2	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 500	93.0	97.2	98.0	99.2	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
GE 400	93.0	97.2	98.0	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 300	93.0	97.2	98.0	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 200	93.0	97.2	98.0	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	93.0	97.2	98.0	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 0	93.0	97.2	98.0	99.3	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS(LST): ALL

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	56.5	57.4	57.6	57.7	57.8	57.8	57.8	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9	57.9
GE 20000	64.0	65.2	65.4	65.4	65.6	65.6	65.6	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.7	65.8
GE 18000	64.1	65.3	65.4	65.5	65.7	65.7	65.7	65.7	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
GE 16000	64.2	65.4	65.6	65.6	65.8	65.8	65.8	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9	65.9
GE 14000	65.7	66.9	67.1	67.2	67.3	67.4	67.4	67.4	67.4	67.5	67.5	67.5	67.5	67.5	67.5	67.5
GE 12000	66.8	68.1	68.3	68.4	68.6	68.6	68.6	68.6	68.6	68.7	68.7	68.7	68.7	68.7	68.7	68.7
GE 10000	71.5	73.1	73.3	73.4	73.6	73.6	73.6	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.8
GE 9000	72.1	73.7	73.9	74.1	74.2	74.2	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.4	74.4
GE 8000	75.9	77.7	78.0	78.2	78.4	78.4	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.5	78.6	78.6
GE 7000	77.3	79.3	79.6	79.8	80.0	80.0	80.0	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.1	80.2
GE 6000	79.6	81.8	82.2	82.4	82.6	82.6	82.7	82.7	82.7	82.8	82.8	82.8	82.8	82.8	82.8	82.8
GE 5000	82.6	85.3	85.7	85.9	86.2	86.2	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.4	86.4
GE 4500	83.0	85.7	86.1	86.4	86.7	86.7	86.7	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8
GE 4000	85.0	88.0	88.5	88.8	89.1	89.1	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.3	89.3
GE 3500	85.5	88.6	89.1	89.4	89.7	89.7	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.8	89.9
GE 3000	87.0	90.5	91.0	91.3	91.6	91.7	91.7	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8	91.8
GE 2500	88.3	91.9	92.5	92.8	93.1	93.1	93.2	93.2	93.3	93.3	93.3	93.3	93.3	93.3	93.3	93.3
GE 2000	89.3	93.2	93.9	94.3	94.7	94.7	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.9	94.9
GE 1800	89.5	93.4	94.1	94.5	94.9	94.9	95.0	95.0	95.1	95.1	95.1	95.1	95.1	95.1	95.1	95.2
GE 1500	90.3	94.4	95.1	95.5	95.9	95.9	96.0	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.2	96.2
GE 1200	90.9	95.2	96.0	96.5	97.0	97.0	97.1	97.1	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2
GE 1000	91.0	95.4	96.3	96.9	97.4	97.4	97.5	97.6	97.6	97.6	97.6	97.6	97.6	97.7	97.7	97.7
GE 900	91.1	95.7	96.6	97.2	97.8	97.9	98.0	98.1	98.1	98.1	98.1	98.1	98.2	98.2	98.2	98.2
GE 800	91.1	95.8	96.8	97.4	98.0	98.2	98.3	98.3	98.3	98.4	98.4	98.4	98.4	98.4	98.5	98.5
GE 700	91.2	96.0	96.9	97.7	98.4	98.5	98.7	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.9	98.9
GE 600	91.2	96.0	97.0	97.8	98.6	98.7	98.9	99.0	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1
GE 500	91.2	96.2	97.2	98.1	98.9	99.0	99.2	99.3	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.5
GE 400	91.2	96.2	97.3	98.2	99.0	99.2	99.4	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.7
GE 300	91.2	96.3	97.3	98.3	99.1	99.3	99.5	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.8
GE 200	91.2	96.3	97.3	98.3	99.1	99.3	99.6	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.9	99.9
GE 100	91.2	96.3	97.3	98.3	99.1	99.3	99.6	99.6	99.7	99.8	99.8	99.8	99.8	99.8	99.9	100.0
GE 0	91.2	96.3	97.3	98.3	99.1	99.3	99.6	99.6	99.7	99.8	99.8	99.8	99.8	99.9	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 7200

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(LST): 0000-0200

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	68.6	69.7	69.9	70.0	70.3	70.3	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.6	70.6	70.6
GE 20000	74.6	75.8	76.0	76.1	76.6	76.6	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.9	76.9	76.9
GE 18000	74.6	75.8	76.0	76.1	76.6	76.6	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.9	76.9	76.9
GE 16000	74.6	75.8	76.0	76.1	76.6	76.6	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.9	76.9	76.9
GE 14000	74.8	76.0	76.2	76.3	76.8	76.8	76.9	76.9	76.9	76.9	76.9	76.9	76.9	77.1	77.1	77.1
GE 12000	75.9	77.3	77.5	77.6	78.1	78.1	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.4	78.4	78.4
GE 10000	79.5	81.1	81.3	81.4	81.8	81.8	81.9	81.9	81.9	81.9	81.9	81.9	81.9	82.2	82.2	82.2
GE 9000	80.1	81.7	81.9	82.0	82.5	82.5	82.6	82.6	82.6	82.6	82.6	82.6	82.6	82.8	82.8	82.8
GE 8000	81.0	84.9	85.2	85.3	85.7	85.7	85.8	85.8	85.8	85.8	85.8	85.8	85.8	86.0	86.0	86.0
GE 7000	84.6	86.8	87.0	87.1	87.5	87.5	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.8	87.8	87.8
GE 6000	87.0	89.2	89.7	89.8	90.2	90.2	90.3	90.3	90.3	90.3	90.3	90.3	90.3	90.5	90.5	90.5
GE 5000	89.5	92.0	92.5	92.6	93.0	93.0	93.2	93.2	93.2	93.2	93.2	93.2	93.2	93.4	93.4	93.4
GE 4500	89.9	92.6	93.0	93.1	93.5	93.5	93.8	93.8	93.8	93.8	93.8	93.8	93.8	94.0	94.0	94.0
GE 4000	91.4	94.3	94.8	94.9	95.4	95.5	95.7	95.7	95.7	95.7	95.7	95.7	95.7	95.9	95.9	95.9
GE 3500	91.4	94.5	95.1	95.2	95.6	95.7	95.9	95.9	95.9	95.9	95.9	95.9	95.9	96.1	96.1	96.1
GE 3000	91.9	95.3	95.8	95.9	96.3	96.5	96.8	96.8	96.8	96.8	96.8	96.8	96.8	97.0	97.0	97.0
GE 2500	92.0	95.4	95.9	96.0	96.5	96.6	96.9	96.9	96.9	96.9	96.9	96.9	96.9	97.1	97.1	97.1
GE 2000	92.3	95.6	96.1	96.2	96.7	96.8	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.3	97.3	97.3
GE 1800	92.3	95.6	96.1	96.2	96.7	96.8	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.3	97.3	97.3
GE 1500	92.9	96.3	96.9	97.0	97.4	97.5	97.8	97.8	97.8	97.8	97.8	97.8	97.8	98.2	98.2	98.2
GE 1200	93.4	97.1	97.6	97.7	98.2	98.3	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.9	98.9	98.9
GE 1000	93.4	97.3	97.8	98.0	98.4	98.5	98.8	98.8	98.8	98.8	98.8	98.8	98.8	99.1	99.1	99.1
GE 900	93.4	97.3	98.0	98.1	98.5	98.6	98.9	98.9	98.9	98.9	98.9	98.9	98.9	99.2	99.2	99.2
GE 800	93.4	97.3	98.0	98.1	98.5	98.6	98.9	98.9	98.9	98.9	98.9	98.9	98.9	99.2	99.2	99.2
GE 700	93.4	97.4	98.1	98.2	98.6	98.7	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.4	99.4	99.4
GE 600	93.4	97.5	98.2	98.3	98.7	98.8	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.5	99.5	99.5
GE 500	93.4	97.5	98.2	98.3	98.7	98.8	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.5	99.5	99.5
GE 400	93.4	97.5	98.4	98.5	99.0	99.1	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.9	99.9	99.9
GE 300	93.4	97.5	98.4	98.5	99.0	99.1	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.9	99.9	99.9
GE 200	93.4	97.5	98.4	98.5	99.0	99.1	99.6	99.6	99.6	99.6	99.6	99.6	99.6	100.0	100.0	100.0
GE 100	93.4	97.5	98.4	98.5	99.0	99.1	99.6	99.6	99.6	99.6	99.6	99.6	99.6	100.0	100.0	100.0
GE 0	93.4	97.5	98.4	98.5	99.0	99.1	99.6	99.6	99.6	99.6	99.6	99.6	99.6	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(IST): 0300-0500

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 1	GE 1 1/2	GE 2	GE 2 1/2	GE 3	GE 3 1/2	GE 4	GE 4 1/2	GE 5	GE 5 1/2	GE 6	GE 6 1/2	GE 7	GE 7 1/2	GE 8	GE 8 1/2
NO CEIL	60.4	63.2	63.9	64.2	64.7	64.7	64.9	64.9	64.9	65.1	65.2	65.3	65.3	65.3	65.3	65.4
GE 20000	66.9	70.0	70.8	71.2	71.7	71.7	71.9	71.9	71.9	72.0	72.2	72.3	72.3	72.3	72.3	72.4
GE 18000	66.9	70.0	70.8	71.2	71.7	71.7	71.9	71.9	71.9	72.0	72.2	72.3	72.3	72.3	72.3	72.4
GE 16000	67.0	70.1	70.9	71.3	71.8	71.8	72.0	72.0	72.0	72.2	72.3	72.4	72.4	72.4	72.4	72.5
GE 14000	67.4	70.5	71.3	71.7	72.3	72.3	72.5	72.5	72.5	72.6	72.7	72.8	72.8	72.8	72.8	72.9
GE 12000	68.6	71.7	72.5	72.9	73.4	73.4	73.7	73.7	73.7	73.8	73.9	74.0	74.0	74.0	74.0	74.1
GE 10000	74.0	77.5	78.3	78.7	79.5	79.5	79.7	79.7	79.7	79.8	79.9	80.0	80.0	80.0	80.0	80.1
GE 9000	74.2	77.7	78.5	78.9	79.7	79.7	79.9	79.9	79.9	80.0	80.1	80.2	80.2	80.2	80.2	80.3
GE 8000	76.2	79.9	80.8	81.2	81.9	81.9	82.2	82.2	82.2	82.3	82.4	82.5	82.5	82.5	82.5	82.6
GE 7000	78.1	81.9	82.8	83.2	84.0	84.0	84.2	84.2	84.2	84.3	84.4	84.5	84.5	84.5	84.5	84.6
GE 6000	80.6	84.5	85.4	85.8	86.6	86.6	86.8	86.8	86.8	86.9	87.0	87.1	87.1	87.1	87.1	87.2
GE 5000	83.4	88.3	89.1	89.7	90.4	90.4	90.6	90.6	90.6	90.8	90.9	91.0	91.0	91.0	91.0	91.1
GE 4500	83.9	88.7	89.6	90.1	90.9	90.9	91.1	91.1	91.1	91.2	91.3	91.4	91.4	91.4	91.4	91.5
GE 4000	85.3	91.1	92.4	93.0	93.9	93.9	94.1	94.1	94.1	94.2	94.3	94.4	94.4	94.4	94.4	94.5
GE 3500	85.6	91.5	92.8	93.4	94.3	94.3	94.5	94.5	94.5	94.6	94.7	94.8	94.8	94.8	94.8	94.9
GE 3000	86.2	92.5	93.8	94.4	95.4	95.4	95.6	95.6	95.6	95.7	95.8	95.9	95.9	95.9	95.9	96.0
GE 2500	86.3	92.8	94.1	94.7	95.7	95.7	95.9	95.9	95.9	96.0	96.1	96.2	96.2	96.2	96.2	96.3
GE 2000	86.8	93.2	94.5	95.2	96.1	96.1	96.3	96.3	96.3	96.5	96.6	96.7	96.7	96.7	96.7	96.8
GE 1800	86.8	93.2	94.5	95.2	96.1	96.1	96.3	96.3	96.3	96.5	96.6	96.7	96.7	96.7	96.7	96.8
GE 1500	87.2	93.7	94.9	95.7	96.7	96.7	96.9	96.9	96.9	97.0	97.1	97.2	97.2	97.2	97.2	97.3
GE 1200	87.4	94.2	95.5	96.2	97.2	97.2	97.4	97.4	97.4	97.5	97.6	97.7	97.7	97.7	97.7	97.8
GE 1000	87.5	94.3	95.6	96.3	97.4	97.4	97.6	97.6	97.6	97.7	97.8	98.0	98.0	98.0	98.0	98.1
GE 900	87.5	94.3	95.6	96.3	97.4	97.4	97.6	97.6	97.6	97.7	97.8	98.0	98.0	98.0	98.0	98.1
GE 800	87.5	94.3	95.6	96.3	97.4	97.4	97.6	97.6	97.6	97.7	97.8	98.0	98.0	98.0	98.0	98.1
GE 700	87.5	94.3	95.6	96.3	97.4	97.4	97.6	97.6	97.6	97.7	97.8	98.0	98.0	98.0	98.0	98.1
GE 600	87.5	94.4	95.7	96.6	97.6	97.6	97.8	97.8	97.8	98.0	98.1	98.2	98.2	98.2	98.2	98.3
GE 500	87.5	94.8	96.1	97.0	98.3	98.3	98.7	98.7	98.7	98.8	98.9	99.0	99.0	99.0	99.0	99.1
GE 400	87.8	95.2	96.5	97.3	98.6	98.6	99.0	99.0	99.0	99.1	99.2	99.4	99.4	99.4	99.4	99.7
GE 300	87.8	95.3	96.6	97.4	98.7	98.7	99.1	99.2	99.2	99.4	99.5	99.6	99.7	99.7	99.8	100.0
GE 200	87.8	95.3	96.6	97.4	98.7	98.7	99.1	99.2	99.2	99.4	99.5	99.6	99.7	99.7	99.8	100.0
GE 100	87.8	95.3	96.6	97.4	98.7	98.7	99.1	99.2	99.2	99.4	99.5	99.6	99.7	99.7	99.8	100.0
GE 01	87.8	95.3	96.6	97.4	98.7	98.7	99.1	99.2	99.2	99.4	99.5	99.6	99.7	99.7	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS: 930



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 76-87  
MONTH: JUL HOURS(LST): 0600-0800

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	51.1	54.2	54.9	55.2	55.3	55.5	55.5	55.6	55.6	55.6	55.7	55.7	55.8	55.8	55.9	55.9
GE 20000	60.6	64.3	65.1	65.3	65.5	65.7	65.7	65.8	65.8	65.8	65.9	65.9	66.0	66.0	66.1	66.1
GE 18000	60.8	64.4	65.2	65.4	65.6	65.8	65.8	65.9	65.9	65.9	66.0	66.0	66.1	66.1	66.2	66.2
GE 16000	60.8	64.4	65.2	65.4	65.6	65.8	65.8	65.9	65.9	65.9	66.0	66.0	66.1	66.1	66.2	66.2
GE 14000	62.5	66.2	67.0	67.2	67.4	67.6	67.6	67.7	67.7	67.7	67.8	67.8	68.0	68.0	68.1	68.1
GE 12000	64.4	68.4	69.1	69.4	69.6	69.8	69.8	69.9	69.9	69.9	70.0	70.0	70.1	70.1	70.2	70.2
GE 10000	69.9	74.4	75.2	75.4	75.7	75.9	75.9	76.0	76.0	76.0	76.1	76.1	76.2	76.2	76.3	76.3
GE 9000	70.4	75.4	76.1	76.3	76.7	76.9	76.9	77.0	77.0	77.0	77.1	77.1	77.2	77.2	77.3	77.3
GE 8000	74.5	79.6	80.3	80.5	80.9	81.1	81.1	81.2	81.2	81.2	81.3	81.3	81.4	81.4	81.5	81.5
GE 7000	77.0	82.2	82.9	83.1	83.4	83.7	83.7	83.8	83.8	83.8	83.9	83.9	84.0	84.0	84.1	84.1
GE 6000	78.9	84.4	85.2	85.4	85.7	85.9	85.9	86.0	86.0	86.0	86.1	86.1	86.2	86.2	86.3	86.3
GE 5000	80.4	86.1	87.0	87.2	87.5	87.7	87.7	87.8	87.8	87.8	88.0	88.0	88.1	88.1	88.2	88.2
GE 4500	80.4	86.1	87.0	87.2	87.5	87.7	87.7	87.8	87.8	87.8	88.0	88.0	88.1	88.1	88.2	88.2
GE 4000	81.3	87.5	88.5	88.7	89.2	89.5	89.5	89.6	89.6	89.6	89.7	89.7	89.8	89.8	89.9	89.9
GE 3500	81.3	87.7	88.8	89.1	89.8	90.0	90.0	90.1	90.1	90.1	90.2	90.2	90.3	90.3	90.4	90.4
GE 3000	82.4	89.1	90.2	90.5	91.2	91.4	91.4	91.5	91.5	91.5	91.6	91.6	91.7	91.7	91.8	91.8
GE 2500	82.9	89.7	90.8	91.1	91.7	91.9	91.9	92.0	92.0	92.0	92.2	92.2	92.3	92.3	92.4	92.4
GE 2000	83.2	90.1	91.2	91.5	92.2	92.4	92.4	92.5	92.5	92.5	92.6	92.6	92.7	92.7	92.8	92.8
GE 1800	83.3	90.2	91.3	91.6	92.3	92.5	92.5	92.6	92.6	92.6	92.7	92.7	92.8	92.8	92.9	92.9
GE 1500	84.4	91.5	92.6	93.0	93.7	93.9	93.9	94.0	94.0	94.0	94.1	94.1	94.2	94.2	94.3	94.3
GE 1200	84.6	91.8	92.9	93.3	94.0	94.2	94.2	94.3	94.3	94.3	94.4	94.4	94.5	94.5	94.6	94.6
GE 1000	85.2	92.6	93.8	94.3	94.9	95.2	95.2	95.3	95.3	95.3	95.4	95.4	95.5	95.5	95.6	95.6
GE 900	85.4	92.8	94.0	94.5	95.2	95.4	95.4	95.5	95.5	95.5	95.6	95.6	95.7	95.7	95.8	95.8
GE 800	85.5	93.1	94.4	94.9	95.6	95.8	95.9	96.0	96.0	96.0	96.1	96.1	96.2	96.2	96.3	96.3
GE 700	85.6	93.2	94.5	95.1	95.8	96.0	96.1	96.2	96.2	96.2	96.3	96.3	96.4	96.4	96.5	96.5
GE 600	85.8	93.7	94.9	95.5	96.2	96.5	96.7	96.8	96.8	96.8	97.1	97.1	97.2	97.2	97.3	97.3
GE 500	85.9	93.9	95.3	96.0	97.3	97.5	97.7	97.8	97.8	97.8	98.2	98.2	98.3	98.3	98.4	98.4
GE 400	85.9	94.0	95.5	96.3	98.0	98.2	98.4	98.6	98.6	98.6	98.9	98.9	99.0	99.1	99.2	99.2
GE 300	85.9	94.0	95.5	96.3	98.0	98.2	98.4	98.6	98.6	98.6	99.1	99.1	99.2	99.4	99.5	99.5
GE 200	85.9	94.0	95.5	96.3	98.1	98.3	98.7	98.9	98.9	98.9	99.1	99.5	99.5	99.6	99.8	99.9
GE 100	85.9	94.0	95.5	96.3	98.1	98.3	98.7	98.9	98.9	98.9	99.1	99.5	99.5	99.6	100.0	100.0
GE 01	85.9	94.0	95.5	96.3	98.1	98.3	98.7	98.9	98.9	98.9	99.1	99.5	99.5	99.6	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(LST): 0900-1100

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	57.4	58.8	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1
GE 20000	66.5	68.0	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3
GE 18000	66.5	68.0	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3
GE 16000	66.6	68.1	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
GE 14000	68.0	69.5	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8
GE 12000	69.5	71.2	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5	71.5
GE 10000	74.5	76.8	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
GE 9000	74.9	77.4	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7
GE 8000	78.7	82.0	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4	82.4
GE 7000	80.0	83.4	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8
GE 6000	81.8	85.7	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1
GE 5000	82.8	86.8	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2
GE 4500	82.8	86.8	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2
GE 4000	84.2	88.2	88.6	88.6	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
GE 3500	84.2	88.2	88.6	88.6	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
GE 3000	86.1	90.6	91.1	91.1	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2
GE 2500	86.9	91.4	91.8	91.8	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9
GE 2000	88.2	93.0	93.4	93.4	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5
GE 1800	88.3	93.1	93.5	93.5	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7	93.7
GE 1500	89.0	94.2	94.6	94.6	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8
GE 1200	90.0	95.5	96.2	96.2	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
GE 1000	90.9	96.6	97.3	97.3	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5
GE 900	91.1	96.9	97.7	97.7	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
GE 800	91.2	97.3	98.2	98.2	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
GE 700	91.4	97.6	98.5	98.6	98.8	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
GE 600	91.4	97.6	98.5	98.6	99.0	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
GE 500	91.4	97.8	98.7	98.9	99.5	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8
GE 400	91.4	98.0	98.8	99.0	99.6	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
GE 300	91.4	98.0	98.8	99.0	99.6	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 200	91.4	98.0	98.8	99.0	99.6	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	91.4	98.0	98.8	99.0	99.6	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 0	91.4	98.0	98.8	99.0	99.6	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORMS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(LST): 1200-1400

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	58.8	59.9	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2
GE 20000	68.6	70.2	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5	70.5
GE 18000	69.0	70.6	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
GE 16000	69.4	71.0	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3	71.3
GE 14000	70.8	72.4	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
GE 12000	72.5	74.2	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5
GE 10000	78.0	80.0	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3
GE 9000	78.4	80.4	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8
GE 8000	81.2	83.9	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3	84.3
GE 7000	82.2	84.9	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4	85.4
GE 6000	83.0	85.8	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2
GE 5000	85.2	88.1	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5
GE 4500	85.3	88.2	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6
GE 4000	87.2	90.2	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6
GE 3500	87.4	90.9	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3
GE 3000	89.8	94.0	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
GE 2500	90.4	94.8	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
GE 2000	92.2	96.8	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4
GE 1800	92.2	96.9	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5
GE 1500	92.3	97.3	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
GE 1200	92.8	98.0	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
GE 1000	93.1	98.4	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
GE 900	93.1	98.4	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
GE 800	93.2	98.6	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
GE 700	93.2	98.6	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 600	93.2	98.6	99.4	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 500	93.2	98.6	99.4	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
GE 400	93.2	98.6	99.5	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 300	93.2	98.6	99.5	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 200	93.2	98.6	99.5	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	93.2	98.6	99.5	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 0	93.2	98.6	99.5	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS: 1500-1700

CEILING IN FEET	VISIBILITY IN STATUTE MILES																	
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0		
NO CEIL	61.8	62.6	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9		
GE 20000	72.5	73.7	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0	74.0		
GE 18000	72.6	73.8	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1		
GE 16000	72.6	73.8	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1		
GE 14000	73.3	74.5	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8		
GE 12000	74.9	76.1	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5		
GE 10000	81.3	82.6	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9	82.9		
GE 9000	81.9	83.2	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5		
GE 8000	85.1	86.5	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8		
GE 7000	86.1	87.6	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0		
GE 6000	88.1	89.8	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1	90.1		
GE 5000	90.1	92.2	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5		
GE 4500	90.2	92.3	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6		
GE 4000	91.9	94.0	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3	94.3		
GE 3500	92.3	94.4	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7		
GE 3000	94.1	96.7	97.0	97.0	97.0	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1		
GE 2500	94.7	97.7	98.1	98.1	98.1	98.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2		
GE 2000	95.6	99.1	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6		
GE 1800	95.6	99.1	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6		
GE 1500	95.6	99.1	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6		
GE 1200	95.6	99.1	99.5	99.6	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8		
GE 1000	95.7	99.2	99.6	99.7	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
GE 900	95.7	99.2	99.6	99.7	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
GE 800	95.7	99.2	99.6	99.7	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
GE 700	95.7	99.2	99.6	99.7	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
GE 600	95.7	99.2	99.6	99.7	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
GE 500	95.7	99.2	99.6	99.7	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
GE 400	95.7	99.2	99.6	99.7	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
GE 300	95.7	99.2	99.6	99.7	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
GE 200	95.7	99.2	99.6	99.7	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
GE 100	95.7	99.2	99.6	99.7	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
GE 0	95.7	99.2	99.6	99.7	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 76-87  
MONTH: JUL HOURS(LST): 1800-2000

CEILING IN FEET	VISIBILITY IN STATUTE MILES														
	GE 10	GE 6	GE 5	GE 4	GE 3	2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	62.7	63.9	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2
GF 20000	72.3	73.6	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9
GE 18000	72.7	74.0	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
GE 16000	72.7	74.0	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
GE 14000	73.7	75.0	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
GE 12000	75.5	76.9	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2
GE 10000	81.2	83.0	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3	83.3
GE 9000	81.9	83.6	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
GE 8000	84.8	86.9	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
GE 7000	86.6	88.9	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2
GE 6000	88.5	91.0	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.5	91.6	91.6	91.6	91.6	91.6
GE 5000	90.8	93.6	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.2	94.2	94.2	94.2	94.2
GE 4500	90.8	93.6	94.1	94.1	94.1	94.2	94.2	94.2	94.2	94.2	94.3	94.3	94.3	94.3	94.3
GE 4000	92.1	94.9	95.5	95.5	95.6	95.6	95.6	95.6	95.6	95.6	95.8	95.8	95.8	95.8	95.8
GE 3500	92.3	95.1	95.7	95.7	95.8	95.8	95.8	95.8	95.8	95.8	96.0	96.0	96.0	96.0	96.0
GE 3000	93.9	96.9	97.4	97.4	97.7	97.7	97.7	97.7	97.7	97.7	98.0	98.0	98.0	98.0	98.0
GE 2500	94.3	97.6	98.2	98.2	98.5	98.5	98.5	98.5	98.5	98.5	98.7	98.7	98.7	98.7	98.7
GE 2000	94.4	98.2	98.7	98.7	99.0	99.0	99.0	99.0	99.0	99.0	99.2	99.2	99.2	99.2	99.2
GE 1800	94.4	98.3	98.8	98.8	99.1	99.1	99.1	99.1	99.1	99.1	99.4	99.4	99.4	99.4	99.4
GE 1500	94.4	98.3	98.9	98.9	99.2	99.2	99.2	99.2	99.2	99.2	99.5	99.5	99.5	99.5	99.5
GE 1200	94.4	98.3	98.9	98.9	99.4	99.4	99.4	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.6
GE 1000	94.4	98.4	99.1	99.1	99.6	99.6	99.6	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.8
GE 900	94.4	98.4	99.1	99.1	99.6	99.6	99.6	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.8
GE 800	94.4	98.4	99.1	99.1	99.6	99.6	99.6	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.8
GE 700	94.4	98.4	99.1	99.1	99.6	99.6	99.6	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.8
GE 600	94.4	98.4	99.1	99.1	99.6	99.6	99.6	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.8
GE 500	94.4	98.4	99.1	99.1	99.6	99.6	99.6	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.8
GE 400	94.4	98.4	99.1	99.1	99.6	99.6	99.6	99.6	99.6	99.6	99.8	99.8	99.8	99.8	99.8
GE 300	94.6	98.6	99.4	99.4	99.8	99.8	99.8	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0
GE 200	94.6	98.6	99.4	99.4	99.8	99.8	99.8	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0
GE 100	94.6	98.6	99.4	99.4	99.8	99.8	99.8	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0
GE 0	94.6	98.6	99.4	99.4	99.8	99.8	99.8	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 927

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORMS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(LST): 2100-2300

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2	GE 1 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16
NO CEIL	70.4	71.0	71.1	71.1	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2	71.2
GE 20000	74.8	75.5	75.8	75.8	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
GE 18000	75.1	75.8	76.2	76.2	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4
GE 16000	75.2	75.9	76.3	76.3	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5
GE 14000	76.5	77.2	77.6	77.6	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8
GE 12000	78.0	79.0	79.3	79.3	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5
GE 10000	81.6	82.5	82.8	82.8	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1
GE 9000	82.1	83.1	83.4	83.4	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6
GE 8000	85.0	86.5	86.8	86.8	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1
GE 7000	86.7	88.6	88.9	88.9	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1	89.1
GE 6000	90.3	92.2	92.6	92.6	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8
GE 5000	92.4	94.6	94.9	94.9	95.3	95.3	95.3	95.3	95.3	95.3	95.4	95.4	95.4	95.4	95.4	95.4
GE 4500	92.7	94.8	95.1	95.1	95.5	95.5	95.5	95.5	95.5	95.5	95.6	95.6	95.6	95.6	95.6	95.6
GE 4000	93.7	96.1	96.4	96.4	96.8	96.8	96.8	96.8	96.8	96.8	96.9	96.9	96.9	96.9	96.9	96.9
GE 3500	93.9	96.3	96.7	96.7	97.0	97.0	97.0	97.0	97.0	97.0	97.1	97.1	97.1	97.1	97.1	97.1
GE 3000	94.3	97.0	97.3	97.3	97.6	97.6	97.6	97.6	97.6	97.6	97.7	97.7	97.7	97.7	97.7	97.7
GE 2500	94.3	97.0	97.3	97.3	97.6	97.6	97.6	97.6	97.6	97.6	97.7	97.7	97.7	97.7	97.7	97.7
GE 2000	94.5	97.3	97.6	97.6	98.0	98.0	98.0	98.0	98.0	98.0	98.1	98.1	98.1	98.1	98.1	98.1
GE 1800	94.6	97.4	97.7	97.7	98.1	98.1	98.1	98.1	98.1	98.1	98.2	98.2	98.2	98.2	98.2	98.2
GE 1500	94.9	97.8	98.2	98.3	98.6	98.6	98.6	98.6	98.6	98.6	98.7	98.7	98.7	98.7	98.7	98.7
GE 1200	95.3	98.3	98.6	98.7	99.0	99.0	99.0	99.0	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1
GE 1000	95.3	98.5	99.0	99.1	99.5	99.5	99.5	99.5	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6
GE 900	95.3	98.7	99.2	99.4	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8
GE 800	95.3	98.7	99.2	99.4	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8
GE 700	95.3	98.7	99.2	99.4	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8
GE 600	95.3	98.7	99.2	99.4	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8
GE 500	95.3	98.7	99.2	99.4	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8
GE 400	95.5	98.9	99.5	99.6	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE 300	95.5	98.9	99.5	99.6	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE 200	95.5	98.9	99.5	99.6	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	95.5	98.9	99.5	99.6	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE 01	95.5	98.9	99.5	99.6	99.9	99.9	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 927

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(LST): ALL

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2	GE 1 1/2	GE 1	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	61.4	62.9	63.3	63.4	63.5	63.5	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.7	63.7	63.7
GE 20000	69.6	71.4	71.8	71.9	72.1	72.1	72.1	72.1	72.1	72.2	72.2	72.2	72.2	72.2	72.2	72.2
GE 18000	69.8	71.5	72.0	72.1	72.2	72.3	72.3	72.3	72.3	72.3	72.3	72.4	72.4	72.4	72.4	72.4
GE 16000	69.8	71.6	72.0	72.1	72.3	72.3	72.4	72.4	72.4	72.4	72.4	72.4	72.5	72.5	72.5	72.5
GE 14000	70.9	72.7	73.1	73.2	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.5	73.5	73.5	73.5	73.5
GE 12000	72.4	74.3	74.8	74.9	75.0	75.1	75.1	75.1	75.1	75.1	75.1	75.2	75.2	75.2	75.2	75.2
GE 10000	77.5	79.7	80.1	80.2	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.6	80.6	80.6	80.6	80.6
GE 9000	78.0	80.3	80.7	80.8	81.0	81.1	81.1	81.1	81.1	81.1	81.1	81.2	81.2	81.2	81.2	81.2
GE 8000	81.1	83.8	84.2	84.3	84.5	84.6	84.6	84.6	84.6	84.6	84.6	84.7	84.7	84.7	84.7	84.7
GE 7000	82.7	85.5	86.0	86.1	86.3	86.3	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.5	86.5	86.5
GE 6000	84.8	87.8	88.3	88.4	88.6	88.7	88.7	88.7	88.7	88.7	88.7	88.8	88.8	88.8	88.8	88.8
GE 5000	86.8	90.2	90.7	90.8	91.1	91.1	91.1	91.1	91.1	91.1	91.2	91.2	91.2	91.3	91.3	91.3
GE 4500	87.0	90.4	90.9	91.0	91.2	91.3	91.3	91.3	91.3	91.3	91.4	91.4	91.4	91.5	91.5	91.5
GE 4000	88.4	92.0	92.6	92.8	93.1	93.1	93.2	93.2	93.2	93.2	93.2	93.2	93.3	93.3	93.3	93.3
GE 3500	88.5	92.3	93.0	93.1	93.4	93.4	93.5	93.5	93.5	93.5	93.5	93.6	93.6	93.6	93.6	93.7
GE 3000	89.8	94.0	94.6	94.8	95.1	95.1	95.2	95.2	95.2	95.2	95.3	95.3	95.3	95.4	95.4	95.4
GE 2500	90.2	94.6	95.2	95.3	95.7	95.7	95.8	95.8	95.8	95.8	95.8	95.9	95.9	95.9	95.9	96.0
GE 2000	90.9	95.4	96.1	96.2	96.5	96.6	96.7	96.7	96.7	96.7	96.7	96.8	96.8	96.8	96.8	96.8
GE 1800	90.9	95.5	96.1	96.3	96.6	96.7	96.7	96.7	96.7	96.7	96.8	96.8	96.8	96.9	96.9	96.9
GE 1500	91.3	96.0	96.7	96.9	97.2	97.3	97.4	97.4	97.4	97.4	97.4	97.4	97.5	97.5	97.5	97.5
GE 1200	91.7	96.5	97.2	97.4	97.8	97.8	97.9	97.9	97.9	97.9	98.0	98.0	98.0	98.1	98.1	98.1
GE 1000	91.9	96.9	97.7	97.9	98.3	98.3	98.4	98.4	98.4	98.4	98.4	98.5	98.5	98.6	98.6	98.6
GE 900	92.0	97.0	97.8	98.0	98.4	98.4	98.5	98.5	98.5	98.5	98.6	98.6	98.6	98.7	98.7	98.7
GE 800	92.0	97.1	97.9	98.1	98.6	98.6	98.7	98.7	98.7	98.7	98.7	98.8	98.8	98.9	98.9	98.9
GE 700	92.1	97.2	98.0	98.2	98.7	98.7	98.8	98.8	98.8	98.9	98.9	99.0	99.0	99.0	99.0	99.0
GE 600	92.1	97.3	98.1	98.3	98.8	98.9	99.0	99.0	99.0	99.0	99.0	99.1	99.1	99.2	99.2	99.2
GE 500	92.1	97.4	98.2	98.5	99.1	99.2	99.3	99.3	99.3	99.3	99.4	99.4	99.4	99.5	99.5	99.5
GE 400	92.2	97.5	98.3	98.7	99.3	99.4	99.5	99.6	99.6	99.6	99.6	99.7	99.7	99.7	99.8	99.8
GE 300	92.2	97.5	98.4	98.7	99.3	99.4	99.6	99.6	99.6	99.6	99.7	99.8	99.8	99.9	99.9	99.9
GE 200	92.2	97.5	98.4	98.7	99.4	99.4	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.9	100.0	100.0
GE 100	92.2	97.5	98.4	98.7	99.4	99.4	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.9	100.0	100.0
GE DI	92.2	97.5	98.4	98.7	99.4	99.4	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.9	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 7434

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG HOURS(IST): 0000-0200

CEILING IN FEET	VISIBILITY IN STATUTE MILES														
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	70.3	71.6	72.0	72.3	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9	72.9
GE 20000	74.0	75.4	75.8	76.0	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
GE 18000	74.0	75.4	75.8	76.0	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
GE 16000	74.0	75.4	75.8	76.0	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
GE 14000	74.6	76.0	76.5	76.7	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
GE 12000	75.5	76.9	77.3	77.5	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2
GE 10000	80.0	81.6	82.3	82.6	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2	83.2
GE 9000	80.4	82.0	82.7	83.0	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7	83.7
GE 8000	83.7	85.3	85.9	86.2	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9	86.9
GE 7000	84.8	86.5	87.1	87.4	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1
GE 6000	85.7	87.3	88.0	88.3	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9
GE 5000	87.6	90.0	90.6	91.0	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
GE 4500	88.3	90.6	91.4	91.7	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4
GE 4000	90.0	93.2	94.1	94.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
GE 3500	90.0	93.3	94.2	94.5	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6
GE 3000	90.6	94.2	95.1	95.4	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
GE 2500	91.2	94.7	95.7	96.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
GE 2000	91.8	95.4	96.6	96.9	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
GE 1800	91.8	95.6	96.8	97.1	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2
GE 1500	91.9	95.8	97.0	97.3	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
GE 1200	92.0	95.9	97.1	97.4	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
GE 1000	92.0	96.1	97.3	97.6	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
GE 900	92.0	96.1	97.3	97.6	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
GE 800	92.0	96.1	97.3	97.6	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
GE 700	92.0	96.1	97.3	97.6	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
GE 600	92.0	96.1	97.3	97.6	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
GE 500	92.2	96.3	97.5	97.8	99.0	99.0	99.0	99.0	99.1	99.2	99.2	99.2	99.2	99.2	99.2
GE 400	92.2	96.5	97.6	98.0	99.1	99.1	99.1	99.1	99.2	99.5	99.5	99.5	99.5	99.5	99.5
GE 300	92.2	96.5	97.6	98.0	99.1	99.1	99.1	99.1	99.5	99.6	99.9	99.9	99.9	99.9	99.9
GE 200	92.2	96.6	97.7	98.1	99.2	99.2	99.2	99.2	99.6	99.7	100.0	100.0	100.0	100.0	100.0
GE 100	92.2	96.6	97.7	98.1	99.2	99.2	99.2	99.2	99.6	99.7	100.0	100.0	100.0	100.0	100.0
GE 0	92.2	96.6	97.7	98.1	99.2	99.2	99.2	99.2	99.6	99.7	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 950



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG HOURS(LST): 0300-0500

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	61.5	63.7	64.2	64.5	65.4	65.4	65.5	65.7	65.7	65.9	66.2	66.2	66.5	66.5	66.5	66.5
GE 20000	64.7	67.1	67.6	68.0	68.8	68.8	68.9	69.1	69.1	69.4	69.7	69.7	69.9	69.9	69.9	69.9
GE 18000	64.8	67.2	67.7	68.1	68.9	68.9	69.0	69.2	69.2	69.5	69.8	69.8	70.0	70.0	70.0	70.0
GE 16000	64.8	67.2	67.7	68.1	68.9	68.9	69.0	69.2	69.2	69.5	69.8	69.8	70.0	70.0	70.0	70.0
GE 14000	66.1	68.5	69.0	69.4	70.2	70.2	70.3	70.5	70.5	70.8	71.1	71.1	71.3	71.3	71.3	71.3
GE 12000	66.9	69.2	69.8	70.1	71.0	71.0	71.1	71.3	71.3	71.5	71.8	71.8	72.0	72.0	72.0	72.0
GE 10000	72.5	75.2	75.7	76.0	76.9	76.9	77.0	77.2	77.2	77.4	77.7	77.7	78.0	78.0	78.0	78.0
GE 9000	72.9	75.6	76.1	76.5	77.3	77.3	77.4	77.6	77.6	77.8	78.2	78.2	78.4	78.4	78.4	78.4
GE 8000	76.2	79.5	80.0	80.3	81.3	81.3	81.4	81.6	81.6	81.8	82.2	82.2	82.4	82.4	82.4	82.4
GE 7000	77.4	80.6	81.2	81.6	82.6	82.6	82.7	82.9	82.9	83.1	83.4	83.4	83.7	83.7	83.7	83.7
GE 6000	79.4	82.6	83.1	83.5	84.5	84.5	84.6	84.8	84.8	85.1	85.4	85.4	85.6	85.6	85.6	85.6
GE 5000	82.2	85.7	86.2	86.7	87.6	87.6	87.7	88.0	88.0	88.2	88.5	88.5	88.7	88.7	88.7	88.7
GE 4500	82.6	86.1	86.7	87.1	88.1	88.1	88.2	88.4	88.4	88.6	88.9	88.9	89.1	89.1	89.1	89.1
GE 4000	84.8	89.1	90.0	90.4	91.5	91.5	91.6	91.8	91.8	92.0	92.4	92.4	92.6	92.6	92.6	92.6
GE 3500	85.1	89.4	90.2	90.6	91.7	91.7	91.8	92.0	92.0	92.3	92.6	92.6	92.8	92.8	92.8	92.8
GE 3000	85.8	90.3	91.2	91.6	92.8	92.8	92.9	93.1	93.1	93.3	93.7	93.7	93.9	93.9	93.9	93.9
GE 2500	85.8	90.4	91.3	91.7	92.9	92.9	93.0	93.2	93.2	93.4	93.8	93.8	94.0	94.0	94.0	94.0
GE 2000	86.0	90.8	91.7	92.2	93.3	93.3	93.4	93.7	93.7	93.9	94.2	94.2	94.4	94.4	94.4	94.4
GE 1800	86.2	91.0	91.9	92.4	93.5	93.5	93.7	93.9	93.9	94.1	94.4	94.4	94.6	94.6	94.6	94.6
GE 1500	86.7	91.5	92.7	93.1	94.3	94.3	94.4	94.6	94.6	94.8	95.2	95.2	95.4	95.4	95.4	95.4
GE 1200	87.0	92.0	93.2	93.7	94.8	94.8	94.9	95.2	95.2	95.4	95.7	95.7	95.9	95.9	95.9	95.9
GE 1000	87.2	92.4	93.5	94.1	95.3	95.3	95.4	95.6	95.6	95.8	96.1	96.1	96.3	96.3	96.3	96.3
GE 900	87.3	92.5	93.7	94.2	95.4	95.4	95.5	95.7	95.7	95.9	96.2	96.2	96.5	96.5	96.5	96.5
GE 800	87.4	92.6	93.8	94.3	95.5	95.5	95.6	95.8	95.8	96.0	96.3	96.3	96.6	96.6	96.6	96.6
GE 700	87.4	92.6	93.8	94.3	95.5	95.5	95.6	95.8	95.8	96.0	96.3	96.3	96.6	96.6	96.6	96.6
GE 600	87.4	92.6	93.8	94.3	95.6	95.6	95.9	96.1	96.1	96.5	96.8	96.8	97.0	97.0	97.0	97.0
GE 500	87.6	92.9	94.1	94.6	95.9	95.9	96.2	96.5	96.5	96.8	97.1	97.1	97.3	97.3	97.3	97.3
GE 400	87.6	92.9	94.1	94.6	96.0	96.0	96.3	96.6	96.6	97.0	97.3	97.3	97.5	97.5	97.5	97.5
GE 300	87.6	93.3	94.8	95.4	96.9	96.9	97.3	97.8	97.8	98.6	98.9	98.9	99.1	99.1	99.1	99.1
GE 200	87.6	93.4	94.9	95.5	97.0	97.0	97.4	98.0	98.0	98.7	99.0	99.0	99.2	99.2	99.2	99.2
GE 100	87.6	93.5	95.1	95.6	97.1	97.1	97.7	98.3	98.3	99.0	99.4	99.4	99.6	99.6	99.6	99.6
GE 0	87.6	93.5	95.1	95.6	97.1	97.1	97.7	98.3	98.3	99.0	99.4	99.4	99.6	99.7	99.7	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG HOURS(LST): 0600-0800

CEILING		VISIBILITY IN STATUTE MILES															
IN FEET	1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	1	49.2	54.1	54.8	55.5	55.9	56.0	56.3	56.7	56.7	56.7	56.7	56.7	57.2	57.4	57.5	57.5
GE 20000		54.7	60.3	61.4	62.3	62.8	62.9	63.3	63.7	63.7	63.7	63.7	63.7	64.3	64.5	64.6	64.6
GE 18000		54.8	60.4	61.5	62.4	62.9	63.0	63.4	63.8	63.8	63.8	63.8	63.8	64.4	64.6	64.7	64.7
GE 16000		54.8	60.4	61.5	62.4	62.9	63.0	63.4	63.8	63.8	63.8	63.8	63.8	64.4	64.6	64.7	64.7
GE 14000		56.0	61.7	62.8	63.7	64.2	64.3	64.7	65.2	65.2	65.2	65.2	65.2	65.8	66.0	66.1	66.1
GE 12000		56.8	62.5	63.5	64.4	64.9	65.1	65.5	65.9	65.9	65.9	65.9	65.9	66.6	66.8	66.9	66.9
GE 10000		61.1	67.1	68.2	69.0	69.6	69.7	70.1	70.6	70.6	70.6	70.6	70.6	71.3	71.5	71.6	71.6
GE 9000		62.2	68.3	69.4	70.2	70.8	70.9	71.3	71.8	71.8	71.8	71.8	71.8	72.5	72.7	72.8	72.8
GE 8000		67.6	74.2	75.4	76.2	76.8	76.9	77.3	77.8	77.8	77.8	77.8	77.8	78.5	78.7	78.8	78.8
GE 7000		69.4	75.9	77.2	78.1	78.6	78.7	79.1	79.7	79.7	79.7	79.7	79.7	80.3	80.5	80.6	80.6
GE 6000		70.8	77.8	79.1	80.0	80.5	80.6	81.1	81.6	81.6	81.6	81.6	81.6	82.3	82.5	82.6	82.6
GE 5000		72.2	79.5	81.0	81.8	82.4	82.5	82.9	83.4	83.4	83.4	83.4	83.4	84.1	84.3	84.4	84.4
GE 4500		72.3	79.6	81.1	81.9	82.5	82.6	83.0	83.5	83.5	83.5	83.5	83.5	84.2	84.4	84.5	84.5
GE 4000		74.4	82.0	83.7	84.6	85.3	85.4	85.8	86.3	86.3	86.3	86.3	86.3	87.0	87.2	87.3	87.3
GE 3500		75.2	83.0	84.6	85.6	86.3	86.5	86.9	87.4	87.4	87.4	87.4	87.4	88.1	88.3	88.4	88.4
GE 3000		76.6	85.2	86.8	87.8	88.9	89.0	89.5	90.0	90.0	90.0	90.0	90.0	90.6	90.9	91.0	91.0
GE 2500		76.6	85.3	86.9	88.0	89.0	89.1	89.6	90.1	90.1	90.1	90.1	90.1	90.8	91.0	91.1	91.1
GE 2000		77.2	86.2	88.0	89.0	90.1	90.2	90.6	91.2	91.2	91.2	91.2	91.2	91.8	92.0	92.2	92.2
GE 1800		77.3	86.3	88.1	89.1	90.2	90.3	90.8	91.3	91.3	91.3	91.3	91.3	91.9	92.2	92.3	92.3
GE 1500		77.5	86.9	88.7	89.9	91.1	91.2	91.6	92.2	92.2	92.2	92.2	92.2	92.8	93.0	93.1	93.1
GE 1200		77.8	87.5	89.5	91.0	92.3	92.4	92.8	93.3	93.3	93.3	93.3	93.3	94.0	94.2	94.3	94.3
GE 1000		78.0	87.7	89.7	91.2	92.6	92.8	93.2	93.8	93.8	93.8	93.8	93.8	94.4	94.6	94.7	94.7
GE 900		78.1	87.8	89.9	91.4	92.8	93.0	93.4	94.0	94.0	94.0	94.0	94.0	94.7	94.9	95.1	95.1
GE 800		78.3	88.1	90.1	91.6	93.2	93.4	93.9	94.4	94.4	94.4	94.4	94.4	95.2	95.4	95.5	95.5
GE 700		78.3	88.2	90.4	91.9	93.5	93.8	94.2	94.7	94.7	94.8	94.8	94.8	95.5	95.7	95.8	95.8
GE 600		78.4	88.4	90.6	92.2	93.9	94.1	94.5	95.1	95.1	95.2	95.2	95.2	95.8	96.0	96.1	96.1
GE 500		78.5	88.8	91.2	93.2	95.1	95.3	95.8	96.3	96.3	96.5	96.5	96.5	97.1	97.3	97.4	97.4
GE 400		78.6	89.1	91.7	93.8	95.7	95.9	96.5	97.1	97.1	97.4	97.4	97.4	98.3	98.5	98.7	98.7
GE 300		78.6	89.2	91.8	93.9	95.8	96.1	96.9	97.5	97.5	97.8	97.8	97.8	98.8	99.0	99.2	99.2
GE 200		78.6	89.2	91.9	94.0	95.9	96.2	97.0	97.6	97.6	98.1	98.2	98.2	99.1	99.4	99.6	99.6
GE 100		78.6	89.2	92.0	94.1	96.0	96.3	97.2	97.8	97.8	98.3	98.4	98.4	99.4	99.6	99.8	99.8
GE 0		78.6	89.2	92.0	94.1	96.0	96.3	97.2	97.8	97.8	98.3	98.4	98.4	99.4	99.6	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG HOURS(IST): 0900-1100

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	51.1	55.6	55.8	56.2	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3
GE 20000	59.1	64.4	64.8	65.3	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4	65.4
GE 18000	59.7	65.2	65.6	66.0	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1
GE 16000	59.7	65.2	65.6	66.0	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1	66.1
GE 14000	60.6	66.1	66.6	67.0	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
GE 12000	62.3	68.0	68.4	68.8	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9
GE 10000	65.4	71.7	72.2	72.6	72.7	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8
GE 9000	66.1	72.6	73.0	73.4	73.5	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7
GE 8000	70.0	76.9	77.3	77.7	77.8	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
GE 7000	70.9	77.6	78.3	78.7	78.9	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0
GE 6000	72.0	79.1	79.6	80.0	80.2	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3
GE 5000	73.4	81.4	81.8	82.4	82.6	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
GE 4500	73.8	81.7	82.2	82.7	82.9	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0	83.0
GE 4000	75.8	84.5	84.9	85.9	86.1	86.5	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 3500	76.6	85.3	85.7	86.7	86.9	87.2	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3	87.3
GE 3000	78.6	87.5	88.0	88.9	89.5	89.8	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9
GE 2500	79.1	88.2	88.6	89.6	90.1	90.4	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5	90.5
GE 2000	80.3	89.7	90.2	91.2	91.7	92.0	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2
GE 1800	80.6	90.0	90.5	91.5	92.0	92.4	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5	92.5
GE 1500	81.0	90.4	91.0	91.9	92.5	92.8	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
GE 1200	81.8	91.8	92.6	93.7	94.3	94.6	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7	94.7
GE 1000	82.3	92.5	93.3	94.4	95.1	95.4	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
GE 900	82.4	92.6	93.7	94.8	95.5	95.8	95.9	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
GE 800	82.5	92.7	93.9	95.1	95.8	96.1	96.2	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3
GE 700	82.6	93.3	94.6	95.8	96.6	96.9	97.0	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1	97.1
GE 600	82.6	93.3	94.6	95.8	96.7	97.0	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
GE 500	82.8	93.9	95.3	96.5	97.4	97.8	98.0	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
GE 400	82.9	94.3	95.9	97.1	98.1	98.6	98.7	99.0	99.0	99.0	99.0	99.1	99.1	99.1	99.1	99.1
GE 300	82.9	94.4	96.0	97.2	98.3	99.2	99.5	99.8	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0
GE 200	82.9	94.4	96.0	97.2	98.3	99.2	99.5	99.8	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0
GE 100	82.9	94.4	96.0	97.2	98.3	99.2	99.5	99.8	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0
GE 0	82.9	94.4	96.0	97.2	98.3	99.2	99.5	99.8	99.8	99.8	99.8	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG HOURS(IST): 1200-1400

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	51.0	55.7	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8
GE 20000	58.7	63.4	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5
GE 18000	58.8	63.7	63.8	63.8	63.8	63.8	63.8	63.8	63.8	63.8	63.8	63.8	63.8	63.8	63.8	63.8
GE 16000	58.8	63.8	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
GE 14000	59.5	64.7	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8
GE 12000	61.6	67.3	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4
GE 10000	67.6	73.3	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4	73.4
GE 9000	68.6	74.3	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4
GE 8000	71.5	77.2	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5
GE 7000	72.5	78.3	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6
GE 6000	73.5	79.6	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9
GE 5000	76.6	83.2	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5
GE 4500	76.9	83.5	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
GE 4000	79.9	87.0	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4
GE 3500	81.2	88.3	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
GE 3000	83.4	91.1	91.7	91.8	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
GE 2500	85.4	93.1	93.8	93.9	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
GE 2000	87.0	94.8	95.5	95.6	95.8	95.8	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9
GE 1800	87.1	94.9	95.7	95.8	96.0	96.0	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1	96.1
GE 1500	87.7	95.8	96.6	96.7	96.9	96.9	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
GE 1200	88.4	97.2	98.0	98.2	98.4	98.4	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
GE 1000	88.5	97.3	98.3	98.5	98.7	98.7	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
GE 900	88.7	97.7	98.7	98.9	99.1	99.1	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
GE 800	89.0	98.1	99.0	99.2	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 700	89.0	98.1	99.0	99.2	99.5	99.5	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 600	89.0	98.2	99.1	99.4	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
GE 500	89.0	98.2	99.1	99.4	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
GE 400	89.0	98.2	99.1	99.4	99.7	99.7	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
GE 300	89.0	98.2	99.2	99.5	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 200	89.0	98.2	99.2	99.5	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	89.0	98.2	99.2	99.5	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 0	89.0	98.2	99.2	99.5	99.8	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG HOURS(LST): 1500-1700

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	52.9	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3
GE 20000	62.0	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7	67.7
GE 18000	62.2	67.8	67.8	67.8	67.8	67.8	67.8	67.8	67.8	67.8	67.8	67.8	67.8	67.8	67.8	67.8
GE 16000	62.3	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
GE 14000	62.9	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8
GE 12000	64.7	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6
GE 10000	69.6	76.0	76.1	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3
GE 9000	70.5	77.0	77.1	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
GE 8000	73.9	80.5	80.9	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1
GE 7000	74.8	81.7	82.0	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3	82.3
GE 6000	76.3	84.0	84.3	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
GE 5000	78.5	86.9	87.3	87.5	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6
GE 4500	78.9	87.3	87.7	88.0	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1	88.1
GE 4000	82.0	90.6	91.2	91.5	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6	91.6
GE 3500	82.5	91.2	91.7	92.2	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4
GE 3000	84.7	94.0	94.5	94.9	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
GE 2500	86.6	96.3	96.9	97.3	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5	97.5
GE 2000	87.4	97.3	97.8	98.1	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5
GE 1800	87.6	97.5	98.1	98.5	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7	98.7
GE 1500	88.0	97.8	98.4	98.8	99.0	99.0	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
GE 1200	88.1	98.4	98.9	99.4	99.6	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9
GE 1000	88.1	98.5	99.0	99.5	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 900	88.1	98.5	99.0	99.5	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 800	88.1	98.5	99.0	99.5	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 700	88.1	98.5	99.0	99.5	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 600	88.1	98.5	99.0	99.5	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 500	88.1	98.5	99.0	99.5	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 400	88.1	98.5	99.0	99.5	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 300	88.1	98.5	99.0	99.5	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 200	88.1	98.5	99.0	99.5	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	88.1	98.5	99.0	99.5	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 0	88.1	98.5	99.0	99.5	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG HOURS(IST): 1800-2000

CEILING		VISIBILITY IN STATUTE MILES															
IN FEET	10	6	5	4	3	2 1/2	2	1 1/2	1 1/4	1	3/4	5/8	1/2	5/16	1/4	0	
NO CEIL	58.7	63.9	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	
GE 20000	65.9	71.7	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	71.8	
GE 18000	66.5	72.3	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	
GE 16000	66.5	72.3	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	72.4	
GE 14000	66.5	72.4	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	72.5	
GE 12000	67.6	73.8	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	
GE 10000	72.3	79.0	79.1	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	
GE 9000	73.8	80.8	80.9	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	
GE 8000	76.7	83.9	84.0	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	
GE 7000	77.5	84.8	84.9	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	
GE 6000	79.7	87.5	87.6	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	87.7	
GE 5000	81.8	89.9	90.1	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	90.2	
GE 4500	82.5	90.5	90.9	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	
GE 4000	84.7	93.7	94.0	94.3	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	
GE 3500	85.2	94.2	94.5	94.8	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	94.9	
GE 3000	87.4	97.1	97.4	97.7	97.8	97.8	97.8	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	
GE 2500	88.2	98.0	98.3	98.6	98.7	98.7	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	
GE 2000	88.3	98.5	98.8	99.1	99.2	99.2	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	
GE 1800	88.3	98.5	98.8	99.1	99.2	99.2	99.2	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4	
GE 1500	88.3	98.5	98.8	99.2	99.4	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	
GE 1200	88.3	98.5	98.8	99.2	99.4	99.4	99.4	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	
GE 1000	88.3	98.6	98.9	99.4	99.5	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	
GE 900	88.3	98.6	98.9	99.4	99.5	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	
GE 800	88.3	98.6	98.9	99.4	99.5	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	
GE 700	88.3	98.6	98.9	99.4	99.5	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	
GE 600	88.3	98.6	98.9	99.4	99.5	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	
GE 500	88.3	98.6	98.9	99.4	99.5	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	
GE 400	88.3	98.6	98.9	99.4	99.5	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	
GE 300	88.3	98.6	98.9	99.4	99.5	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	100.0	100.0	100.0	
GE 200	88.3	98.6	98.9	99.4	99.5	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	100.0	100.0	100.0	
GE 100	88.3	98.6	98.9	99.4	99.5	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	100.0	100.0	100.0	
GE 0	88.3	98.6	98.9	99.4	99.5	99.5	99.5	99.6	99.7	99.7	99.7	99.7	99.7	100.0	100.0	100.0	

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG HOURS(IST): 2100-2300

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	68.7	73.1	73.3	73.5	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7
GE 20000	73.7	78.1	78.3	78.5	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6	78.6
GE 18000	74.0	78.4	78.6	78.8	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9
GE 16000	74.0	78.4	78.6	78.8	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9	78.9
GE 14000	74.2	78.6	78.8	79.0	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1	79.1
GE 12000	75.4	79.9	80.1	80.3	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4	80.4
GE 10000	78.9	83.4	83.8	84.0	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1
GE 9000	80.1	84.6	84.9	85.2	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3	85.3
GE 8000	82.3	87.0	87.3	87.5	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6
GE 7000	83.0	87.7	88.1	88.3	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4	88.4
GE 6000	83.7	88.6	88.9	89.1	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2	89.2
GE 5000	85.7	91.2	91.5	91.9	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
GE 4500	85.8	91.3	91.6	92.0	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2
GE 4000	87.5	94.0	94.3	95.1	95.4	95.4	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
GE 3500	87.5	94.0	94.3	95.1	95.4	95.4	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
GE 3000	89.4	96.3	96.8	97.5	98.0	98.0	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
GE 2500	89.9	96.9	97.5	98.3	98.7	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
GE 2000	90.0	97.0	97.6	98.4	98.8	98.8	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9	98.9
GE 1800	90.0	97.2	97.8	98.6	99.0	99.0	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1	99.1
GE 1500	90.0	97.3	98.2	98.9	99.4	99.4	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5	99.5
GE 1200	90.0	97.3	98.2	98.9	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
GE 1000	90.0	97.3	98.2	98.9	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
GE 900	90.0	97.3	98.2	98.9	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
GE 800	90.0	97.3	98.2	98.9	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
GE 700	90.0	97.3	98.2	98.9	99.5	99.5	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
GE 600	90.0	97.3	98.2	98.9	99.5	99.5	99.6	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 500	90.0	97.3	98.2	98.9	99.5	99.5	99.6	99.6	99.6	99.9	99.9	99.9	99.9	99.9	99.9	99.9
GE 400	90.1	97.4	98.3	99.0	99.6	99.6	99.7	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 300	90.1	97.4	98.3	99.0	99.6	99.6	99.7	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 200	90.1	97.4	98.3	99.0	99.6	99.6	99.7	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	90.1	97.4	98.3	99.0	99.6	99.6	99.7	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 0	90.1	97.4	98.3	99.0	99.6	99.6	99.7	99.7	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG HOURS(IST): ALL

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2	GE 1 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16
NO CEIL	57.9	61.9	62.2	62.4	62.7	62.7	62.7	62.8	62.8	62.8	62.8	62.9	62.9	63.0	63.0	63.0
GE 20000	64.1	68.5	68.9	69.1	69.4	69.4	69.5	69.6	69.6	69.6	69.6	69.6	69.6	69.6	69.7	69.8
GE 18000	64.3	68.8	69.2	69.4	69.7	69.7	69.8	69.8	69.8	69.8	69.8	69.9	69.9	69.9	70.0	69.8
GE 16000	64.4	68.8	69.2	69.4	69.7	69.7	69.8	69.8	69.8	69.9	69.9	69.9	69.9	69.9	70.0	70.1
GE 14000	65.1	69.6	70.0	70.2	70.5	70.5	70.6	70.6	70.7	70.7	70.7	70.7	70.7	70.7	70.8	70.9
GE 12000	66.3	71.0	71.4	71.6	71.9	71.9	72.0	72.1	72.1	72.1	72.1	72.2	72.2	72.3	72.3	72.3
GE 10000	70.9	75.9	76.3	76.7	76.9	77.0	77.0	77.1	77.1	77.2	77.2	77.2	77.2	77.3	77.3	77.3
GE 9000	71.8	76.9	77.3	77.6	77.9	77.9	78.0	78.1	78.1	78.1	78.1	78.2	78.2	78.3	78.3	78.3
GE 8000	75.2	80.6	81.0	81.3	81.6	81.7	81.7	81.8	81.8	81.8	81.8	81.9	81.9	82.0	82.0	82.0
GE 7000	76.3	81.7	82.2	82.5	82.8	82.8	82.9	83.0	83.0	83.0	83.0	83.1	83.1	83.2	83.2	83.2
GE 6000	77.6	83.3	83.8	84.1	84.4	84.5	84.5	84.6	84.6	84.6	84.7	84.7	84.7	84.8	84.8	84.9
GE 5000	79.7	86.0	86.5	86.9	87.2	87.2	87.3	87.4	87.4	87.4	87.4	87.5	87.5	87.6	87.6	87.6
GE 4500	80.1	86.3	86.9	87.3	87.6	87.6	87.7	87.8	87.8	87.8	87.8	87.9	87.9	88.0	88.0	88.0
GE 4000	82.4	89.3	89.9	90.5	90.9	90.9	91.0	91.1	91.1	91.2	91.2	91.2	91.2	91.3	91.3	91.3
GE 3500	82.9	89.8	90.5	91.0	91.5	91.5	91.6	91.7	91.7	91.8	91.8	91.8	91.8	91.9	91.9	91.9
GE 3000	84.6	92.0	92.7	93.2	93.8	93.9	94.0	94.1	94.1	94.1	94.1	94.2	94.2	94.3	94.3	94.3
GE 2500	85.3	92.9	93.6	94.2	94.8	94.8	94.9	95.0	95.0	95.1	95.1	95.1	95.1	95.2	95.2	95.2
GE 2000	86.0	93.7	94.5	95.1	95.7	95.7	95.8	96.0	96.0	96.0	96.0	96.0	96.0	96.1	96.2	96.2
GE 1800	86.1	93.9	94.7	95.3	95.9	95.9	96.0	96.1	96.1	96.2	96.2	96.2	96.2	96.3	96.3	96.4
GE 1500	86.4	94.3	95.2	95.7	96.4	96.4	96.6	96.7	96.7	96.7	96.7	96.8	96.8	96.9	96.9	96.9
GE 1200	86.7	94.8	95.8	96.4	97.1	97.2	97.3	97.4	97.4	97.5	97.5	97.5	97.5	97.6	97.6	97.6
GE 1000	86.8	95.1	96.0	96.7	97.4	97.4	97.6	97.7	97.7	97.8	97.8	97.8	97.8	97.9	97.9	97.9
GE 900	86.9	95.1	96.2	96.8	97.5	97.6	97.8	97.9	97.9	98.0	98.0	98.0	98.0	98.1	98.1	98.1
GE 800	86.9	95.2	96.3	96.9	97.7	97.7	97.9	98.0	98.0	98.1	98.1	98.1	98.1	98.2	98.3	98.3
GE 700	87.0	95.3	96.4	97.1	97.8	97.9	98.1	98.2	98.2	98.3	98.3	98.3	98.3	98.4	98.4	98.4
GE 600	87.0	95.4	96.5	97.1	97.9	98.0	98.2	98.3	98.3	98.4	98.4	98.4	98.4	98.5	98.6	98.6
GE 500	87.1	95.6	96.7	97.4	98.2	98.3	98.5	98.6	98.6	98.8	98.8	98.8	98.8	98.9	99.0	99.0
GE 400	87.1	95.7	96.8	97.6	98.4	98.5	98.7	98.9	98.9	99.1	99.1	99.1	99.1	99.3	99.3	99.3
GE 300	87.1	95.8	97.0	97.7	98.6	98.7	99.0	99.2	99.3	99.5	99.6	99.6	99.6	99.7	99.8	99.8
GE 200	87.1	95.8	97.0	97.8	98.6	98.8	99.0	99.3	99.3	99.6	99.6	99.6	99.6	99.8	99.8	99.9
GE 100	87.1	95.8	97.0	97.8	98.6	98.8	99.1	99.4	99.4	99.6	99.7	99.7	99.7	99.9	99.9	99.9
GE 0	87.1	95.8	97.0	97.8	98.6	98.8	99.1	99.4	99.4	99.6	99.7	99.7	99.7	99.9	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS: 7440



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: SEP HOURS(LST): 0000-0200

CEILING		VISIBILITY IN STATUTE MILES																
IN FEET		GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0	
NO CEIL		61.9	64.1	64.1	64.2	64.3	64.3	64.3	64.3	64.3	64.4	64.4	64.4	64.7	64.8	64.9	65.1	
GE 20000	64.1	66.6	66.6	66.8	66.9	66.9	66.9	66.9	66.9	66.9	67.0	67.0	67.0	67.2	67.3	67.4	67.7	
GE 18000	64.1	66.6	66.6	66.8	66.9	66.9	66.9	66.9	66.9	66.9	67.0	67.0	67.0	67.2	67.3	67.4	67.7	
GE 16000	64.1	66.6	66.6	66.8	66.9	66.9	66.9	66.9	66.9	66.9	67.0	67.0	67.0	67.2	67.3	67.4	67.7	
GE 14000	64.3	66.8	66.8	67.0	67.1	67.1	67.1	67.1	67.1	67.1	67.2	67.2	67.2	67.4	67.6	67.7	67.9	
GE 12000	64.9	67.3	67.3	67.6	67.7	67.7	67.7	67.7	67.7	67.7	67.8	67.8	67.8	68.0	68.1	68.2	68.4	
GE 10000	70.4	73.0	73.0	73.2	73.3	73.3	73.3	73.3	73.3	73.3	73.4	73.4	73.4	73.7	73.8	73.9	74.1	
GE 9000	70.7	73.2	73.2	73.4	73.6	73.6	73.6	73.6	73.6	73.6	73.7	73.7	73.7	73.9	74.0	74.1	74.3	
GE 8000	72.1	74.7	74.7	74.9	75.0	75.0	75.0	75.0	75.0	75.0	75.1	75.1	75.1	75.3	75.4	75.6	75.8	
GE 7000	73.1	75.9	75.9	76.1	76.2	76.3	76.3	76.3	76.3	76.3	76.4	76.4	76.4	76.7	76.8	76.9	77.1	
GE 6000	74.6	77.4	77.4	77.7	77.8	77.9	77.9	77.9	77.9	77.9	78.0	78.0	78.0	78.2	78.3	78.4	78.7	
GE 5000	78.3	81.6	81.6	82.0	82.1	82.2	82.2	82.2	82.2	82.2	82.3	82.3	82.3	82.6	82.7	82.8	83.0	
GE 4500	79.1	82.3	82.3	82.8	82.9	83.0	83.0	83.0	83.0	83.0	83.1	83.1	83.1	83.3	83.4	83.6	83.8	
GE 4000	82.0	85.7	85.7	86.1	86.2	86.3	86.3	86.3	86.3	86.3	86.4	86.4	86.4	86.7	86.8	86.9	87.1	
GE 3500	82.1	85.8	85.8	86.2	86.3	86.4	86.4	86.4	86.4	86.4	86.6	86.6	86.6	86.8	86.9	87.0	87.2	
GE 3000	83.3	87.1	87.1	87.6	87.7	87.8	87.8	87.8	87.8	87.8	87.9	87.9	87.9	88.1	88.2	88.3	88.6	
GE 2500	84.8	88.6	88.6	89.0	89.1	89.2	89.2	89.2	89.2	89.2	89.3	89.3	89.3	89.6	89.7	89.8	90.0	
GE 2000	85.7	89.4	89.4	89.9	90.0	90.1	90.1	90.1	90.1	90.1	90.2	90.2	90.2	90.4	90.6	90.7	90.9	
GE 1800	86.3	90.2	90.2	90.7	90.8	90.9	90.9	90.9	90.9	90.9	91.0	91.0	91.0	91.2	91.3	91.4	91.7	
GE 1500	86.9	90.9	91.0	91.4	91.6	91.7	91.7	91.7	91.7	91.7	91.8	91.8	91.8	92.0	92.1	92.2	92.4	
GE 1200	87.9	92.2	92.3	92.8	92.9	93.0	93.0	93.0	93.0	93.0	93.1	93.1	93.1	93.3	93.4	93.6	93.8	
GE 1000	88.9	93.3	93.4	93.9	94.0	94.1	94.1	94.1	94.1	94.1	94.2	94.2	94.2	94.4	94.6	94.7	94.9	
GE 900	89.7	94.1	94.2	94.7	95.1	95.2	95.2	95.2	95.2	95.2	95.3	95.3	95.3	95.6	95.7	95.8	96.0	
GE 800	89.7	94.2	94.3	94.9	95.3	95.4	95.6	95.6	95.6	95.6	95.7	95.7	95.7	95.9	96.0	96.1	96.3	
GE 700	89.8	95.0	95.2	95.9	96.4	96.7	96.8	96.8	96.8	96.8	96.9	96.9	96.9	97.1	97.2	97.3	97.6	
GE 600	90.1	95.6	95.8	96.4	97.0	97.2	97.3	97.3	97.3	97.3	97.4	97.4	97.4	97.7	97.8	97.9	98.1	
GE 500	90.4	95.9	96.2	96.9	97.8	98.0	98.1	98.1	98.1	98.1	98.2	98.2	98.2	98.4	98.6	98.7	98.9	
GE 400	90.4	96.0	96.3	97.0	97.9	98.1	98.2	98.2	98.2	98.2	98.3	98.3	98.3	98.8	98.9	99.0	99.2	
GE 300	90.4	96.0	96.3	97.0	97.9	98.1	98.2	98.6	98.6	98.6	98.7	98.7	98.7	99.2	99.3	99.4	99.7	
GE 200	90.4	96.0	96.3	97.0	98.0	98.2	98.3	98.7	98.7	98.7	98.8	98.8	98.8	99.3	99.4	99.6	99.8	
GE 100	90.4	96.0	96.3	97.0	98.0	98.2	98.3	98.7	98.7	98.7	98.8	98.9	98.9	99.4	99.6	99.7	99.9	
GE CI	90.4	96.0	96.3	97.0	98.0	98.2	98.3	98.7	98.7	98.7	98.8	98.9	98.9	99.4	99.6	99.8	100.0	

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: SEP HOURS(LST): 0300-0500

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	56.2	58.9	59.2	59.4	59.4	59.4	59.6	59.8	59.8	59.8	59.9	59.9	60.0	60.2	60.3	60.4
GE 20000	57.9	60.8	61.1	61.3	61.3	61.3	61.4	61.7	61.7	61.7	61.8	61.8	61.9	62.1	62.2	62.3
GE 18000	57.9	60.8	61.1	61.3	61.3	61.3	61.4	61.7	61.7	61.7	61.8	61.8	61.9	62.1	62.2	62.3
GE 16000	57.9	60.8	61.1	61.3	61.3	61.3	61.4	61.7	61.7	61.7	61.8	61.8	61.9	62.1	62.2	62.3
GE 14000	58.4	61.3	61.7	61.9	61.9	61.9	62.0	62.2	62.2	62.2	62.3	62.3	62.4	62.7	62.8	62.9
GE 12000	60.1	63.0	63.3	63.6	63.6	63.6	63.7	63.9	63.9	63.9	64.0	64.0	64.1	64.3	64.4	64.6
GE 10000	65.2	68.1	68.4	68.7	68.7	68.7	68.8	69.0	69.0	69.0	69.1	69.1	69.2	69.4	69.6	69.7
GE 9000	65.6	68.4	68.8	69.0	69.0	69.0	69.1	69.3	69.3	69.3	69.4	69.4	69.6	69.8	69.9	70.0
GE 8000	67.9	70.8	71.1	71.3	71.3	71.3	71.4	71.7	71.7	71.7	71.8	71.8	71.9	72.1	72.2	72.3
GE 7000	69.6	72.6	72.9	73.1	73.1	73.1	73.2	73.4	73.4	73.4	73.6	73.6	73.7	73.9	74.0	74.1
GE 6000	71.1	74.7	75.1	75.3	75.3	75.3	75.4	75.7	75.7	75.7	75.8	75.8	75.9	76.1	76.2	76.3
GE 5000	74.7	78.3	78.8	79.0	79.0	79.0	79.1	79.3	79.3	79.3	79.4	79.4	79.6	79.8	79.9	80.0
GE 4500	75.1	78.8	79.2	79.4	79.4	79.4	79.6	79.8	79.8	79.8	79.9	79.9	80.0	80.2	80.3	80.4
GE 4000	77.4	81.4	81.9	82.1	82.1	82.1	82.2	82.4	82.4	82.4	82.6	82.6	82.7	82.9	83.0	83.1
GE 3500	78.3	82.3	82.8	83.0	83.0	83.0	83.1	83.3	83.3	83.3	83.4	83.4	83.6	83.8	83.9	84.0
GE 3000	81.0	85.1	85.6	85.9	85.9	85.9	86.0	86.2	86.2	86.2	86.3	86.4	86.6	86.8	86.9	87.0
GE 2500	81.9	86.1	86.6	86.9	86.9	86.9	87.0	87.2	87.2	87.2	87.3	87.4	87.6	87.8	87.9	88.0
GE 2000	83.0	87.4	88.0	88.3	88.3	88.3	88.4	88.7	88.7	88.7	88.8	88.9	89.0	89.2	89.3	89.4
GE 1800	83.6	88.1	88.7	89.0	89.0	89.0	89.1	89.3	89.3	89.3	89.4	89.6	89.7	89.9	90.0	90.1
GE 1500	84.3	89.0	89.6	89.9	89.9	89.9	90.0	90.2	90.2	90.2	90.3	90.4	90.6	90.8	90.9	91.0
GE 1200	85.4	90.3	90.9	91.2	91.2	91.2	91.3	91.6	91.6	91.6	91.7	91.8	91.9	92.1	92.2	92.3
GE 1000	87.0	92.0	92.7	93.0	93.0	93.0	93.1	93.3	93.3	93.3	93.4	93.6	93.7	93.9	94.0	94.1
GE 900	87.2	92.2	92.9	93.3	93.4	93.4	93.6	93.8	93.8	93.8	93.9	94.0	94.1	94.3	94.4	94.6
GE 800	87.8	92.9	93.7	94.7	94.8	94.8	94.9	95.1	95.1	95.1	95.2	95.3	95.4	95.7	95.8	95.9
GE 700	88.1	93.7	94.4	95.9	96.1	96.3	96.4	96.7	96.7	96.7	96.8	96.9	97.0	97.2	97.3	97.4
GE 600	88.2	93.8	94.6	96.1	96.3	96.6	96.8	97.0	97.0	97.0	97.1	97.2	97.3	97.6	97.7	97.8
GE 500	88.3	94.2	95.1	96.8	97.1	97.3	97.6	97.8	97.8	97.9	98.0	98.1	98.2	98.4	98.6	98.7
GE 400	88.3	94.8	95.7	97.3	97.9	98.1	98.3	98.6	98.6	98.7	98.8	98.9	99.0	99.2	99.3	99.4
GE 300	88.3	95.0	95.9	97.6	98.1	98.3	98.6	98.8	98.8	98.9	99.0	99.1	99.2	99.4	99.7	99.8
GE 200	88.3	95.0	95.9	97.6	98.2	98.4	98.7	98.9	98.9	99.1	99.2	99.3	99.4	99.7	99.9	100.0
GE 100	88.3	95.0	95.9	97.6	98.2	98.4	98.7	98.9	98.9	99.1	99.2	99.3	99.4	99.7	99.9	100.0
GE 0	88.3	95.0	95.9	97.6	98.2	98.4	98.7	98.9	98.9	99.1	99.2	99.3	99.4	99.7	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: SEP HOURS(LST): 0600-0800

CEILING IN FEET	VISIBILITY IN STATUTE MILES																
	GE 10	GE 6	GE 5	GE 4	GE 3	2	1 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	47.0	50.4	50.9	51.0	51.2	51.3	51.6	51.7	51.7	51.8	51.8	51.9	52.0	52.0	52.2	52.3	
GE 20000	50.8	54.7	55.1	55.2	55.4	55.6	55.8	55.9	55.9	56.0	56.0	56.1	56.2	56.2	56.4	56.6	
GE 18000	50.8	54.7	55.1	55.2	55.4	55.6	55.8	55.9	55.9	56.0	56.0	56.1	56.2	56.2	56.4	56.6	
GE 16000	50.8	54.7	55.1	55.2	55.4	55.6	55.8	55.9	55.9	56.0	56.0	56.1	56.2	56.2	56.4	56.6	
GE 14000	51.8	55.7	56.1	56.2	56.4	56.6	56.8	56.9	56.9	57.0	57.0	57.1	57.2	57.2	57.4	57.6	
GE 12000	53.7	57.7	58.1	58.2	58.4	58.6	58.8	58.9	58.9	59.0	59.0	59.1	59.2	59.2	59.4	59.6	
GE 10000	57.6	61.7	62.1	62.2	62.4	62.6	62.8	62.9	62.9	63.0	63.0	63.1	63.2	63.2	63.4	63.6	
GE 9000	58.1	62.2	62.7	62.8	63.0	63.1	63.3	63.4	63.4	63.6	63.6	63.7	63.8	63.8	64.0	64.1	
GE 8000	62.0	66.2	66.7	66.8	67.0	67.1	67.3	67.4	67.4	67.6	67.6	67.7	67.8	67.8	68.0	68.1	
GE 7000	63.7	68.0	68.4	68.6	68.8	68.9	69.1	69.2	69.2	69.3	69.3	69.4	69.6	69.6	69.8	69.9	
GE 6000	65.4	69.9	70.3	70.4	70.7	70.8	71.0	71.1	71.1	71.2	71.2	71.3	71.4	71.4	71.7	71.8	
GE 5000	67.6	72.4	73.0	73.1	73.4	73.6	73.8	73.9	74.0	74.1	74.1	74.2	74.3	74.3	74.6	74.7	
GE 4500	68.0	73.0	73.6	73.7	74.0	74.1	74.3	74.4	74.6	74.7	74.7	74.8	74.9	74.9	75.1	75.2	
GE 4000	71.1	76.6	77.1	77.2	77.6	77.7	77.9	78.0	78.1	78.2	78.2	78.3	78.4	78.4	78.7	78.8	
GE 3500	72.2	78.0	78.7	78.8	79.1	79.2	79.4	79.6	79.7	79.8	79.8	79.9	80.0	80.0	80.2	80.3	
GE 3000	75.2	81.2	81.9	82.0	82.3	82.4	82.7	82.9	83.0	83.1	83.1	83.2	83.3	83.3	83.6	83.7	
GE 2500	76.1	82.3	83.0	83.1	83.4	83.7	83.9	84.1	84.2	84.3	84.3	84.4	84.6	84.6	84.8	84.9	
GE 2000	77.7	84.3	85.0	85.1	85.4	85.7	86.1	86.3	86.4	86.6	86.6	86.7	86.8	86.8	87.0	87.1	
GE 1800	78.1	84.9	85.6	85.8	86.1	86.3	86.8	87.0	87.1	87.2	87.2	87.3	87.4	87.4	87.7	87.8	
GE 1500	80.6	87.3	88.1	88.3	88.7	88.9	89.3	89.6	89.7	89.8	89.8	89.9	90.0	90.0	90.2	90.3	
GE 1200	81.2	88.2	89.0	89.2	89.6	89.8	90.2	90.4	90.6	90.7	90.7	90.8	90.9	90.9	91.1	91.2	
GE 1000	82.7	90.0	90.9	91.1	91.4	91.7	92.1	92.3	92.4	92.6	92.6	92.7	92.8	92.8	93.0	93.1	
GE 900	83.1	90.6	91.4	91.7	92.0	92.2	92.7	92.9	93.0	93.1	93.1	93.2	93.3	93.3	93.6	93.7	
GE 800	83.7	91.4	92.4	92.9	93.3	93.6	94.0	94.2	94.3	94.4	94.4	94.6	94.7	94.7	94.9	95.0	
GE 700	84.1	92.0	93.1	93.8	94.2	94.4	95.1	95.3	95.4	95.6	95.6	95.7	95.8	95.8	96.0	96.1	
GE 600	84.1	92.2	93.4	94.1	94.7	94.9	95.7	95.9	96.0	96.2	96.2	96.3	96.4	96.4	96.7	96.8	
GE 500	84.2	92.6	94.0	94.9	95.7	95.9	96.8	97.0	97.1	97.3	97.3	97.4	97.6	97.6	97.8	97.9	
GE 400	84.2	92.7	94.6	95.8	96.7	96.9	98.0	98.2	98.3	98.6	98.6	98.7	98.8	98.8	99.1	99.2	
GE 300	84.2	92.7	94.6	96.0	97.0	97.2	98.3	98.8	98.9	99.1	99.1	99.2	99.3	99.3	99.7	99.8	
GE 200	84.2	92.7	94.6	96.0	97.0	97.2	98.3	98.8	98.9	99.1	99.1	99.2	99.3	99.3	99.7	99.8	
GE 100	84.2	92.7	94.6	96.0	97.0	97.2	98.3	98.8	98.9	99.1	99.1	99.2	99.3	99.3	99.7	99.8	
GE 0	84.2	92.7	94.6	96.0	97.0	97.2	98.3	98.8	98.9	99.1	99.1	99.2	99.3	99.3	99.7	100.0	

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: SEP HOURS(LST): 0900-1100

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	46.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2
GE 20000	51.0	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4
GE 18000	51.1	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6
GE 16000	51.1	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6	53.6
GE 14000	51.9	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4
GE 12000	52.9	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7
GE 10000	56.3	59.8	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9	59.9
GE 9000	57.1	60.9	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0
GE 8000	62.6	66.7	66.8	66.9	67.0	67.0	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
GE 7000	64.3	68.4	68.6	68.7	68.8	68.8	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9
GE 6000	65.9	70.1	70.2	70.3	70.7	70.7	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8	70.8
GE 5000	67.8	72.2	72.3	72.6	72.9	72.9	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0
GE 4500	68.0	72.6	72.7	72.9	73.2	73.2	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3
GE 4000	70.4	75.2	75.4	75.7	76.0	76.0	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
GE 3500	71.1	75.9	76.1	76.4	76.8	76.8	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
GE 3000	74.7	79.9	80.1	80.6	81.0	81.0	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1
GE 2500	76.3	81.7	82.1	82.6	83.0	83.0	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1
GE 2000	79.4	85.0	85.4	85.9	86.3	86.4	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
GE 1800	79.9	85.6	86.0	86.4	86.9	87.0	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2
GE 1500	81.4	87.6	88.1	88.6	89.2	89.3	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6	89.6
GE 1200	83.3	89.9	90.4	90.9	91.9	92.0	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2
GE 1000	84.2	91.1	91.7	92.1	93.2	93.3	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6	93.6
GE 900	84.7	91.6	92.1	92.6	93.7	93.8	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
GE 800	85.0	92.1	92.8	93.6	94.8	94.9	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
GE 700	85.7	93.3	94.2	95.0	96.2	96.4	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8	96.8
GE 600	86.0	94.0	94.9	95.8	97.2	97.4	97.9	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.1
GE 500	86.0	94.0	95.0	95.9	97.4	97.7	98.1	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
GE 400	86.0	94.1	95.1	96.0	97.8	98.1	98.9	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3
GE 300	86.0	94.2	95.2	96.3	98.1	98.4	99.2	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE 200	86.0	94.2	95.2	96.3	98.1	98.4	99.2	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	86.0	94.2	95.2	96.3	98.1	98.4	99.2	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE 0	86.0	94.2	95.2	96.3	98.1	98.4	99.2	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
LSAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: SEP HOURS(IST): 1200-1400

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	44.8	46.0	46.0	46.0	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1
GE 20000	50.9	52.3	52.3	52.3	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4
GE 18000	51.1	52.6	52.6	52.6	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7
GE 16000	51.1	52.6	52.6	52.6	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7
GE 14000	51.8	53.3	53.3	53.3	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4
GE 12000	53.7	55.6	55.6	55.6	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7	55.7
GE 10000	57.3	59.6	59.7	59.7	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8
GE 9000	57.4	59.8	59.9	59.9	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
GE 8000	60.6	63.1	63.2	63.2	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3	63.3
GE 7000	62.2	64.8	64.9	64.9	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3	65.3
GE 6000	63.0	65.6	65.8	65.8	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2	66.2
GE 5000	65.4	68.2	68.7	68.7	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1
GE 4500	65.4	68.2	68.7	68.7	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1	69.1
GE 4000	68.7	71.4	71.9	71.9	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
GE 3500	70.4	73.4	73.9	73.9	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4
GE 3000	76.2	79.6	80.3	80.3	81.2	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3
GE 2500	80.6	84.0	85.1	85.1	86.0	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1
GE 2000	83.0	86.7	87.8	87.8	88.7	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8	88.8
GE 1800	83.3	87.0	88.2	88.2	89.2	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
GE 1500	84.3	88.1	89.4	89.7	90.7	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8	90.8
GE 1200	86.3	90.8	92.1	92.3	93.3	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4
GE 1000	87.1	91.8	93.1	93.3	94.3	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4	94.4
GE 900	87.8	93.1	94.6	94.8	95.8	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9
GE 800	88.4	94.1	95.6	95.8	96.8	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0	97.0
GE 700	88.6	94.4	95.9	96.1	97.2	97.4	97.4	97.4	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
GE 600	88.6	94.6	96.0	96.4	97.7	97.9	97.9	97.9	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
GE 500	88.6	94.6	96.0	96.7	98.0	98.3	98.4	98.9	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
GE 400	88.6	94.6	96.1	96.9	98.2	98.7	98.8	99.3	99.4	99.4	99.4	99.4	99.4	99.4	99.4	99.4
GE 300	88.6	94.7	96.2	97.2	98.6	99.0	99.1	99.7	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
GE 200	88.6	94.7	96.2	97.2	98.6	99.0	99.1	99.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	88.6	94.7	96.2	97.2	98.6	99.0	99.1	99.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE 0	88.6	94.7	96.2	97.2	98.6	99.0	99.1	99.7	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: SEP HOURS(IST): 1500-1700

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	44.4	46.3	46.4	46.4	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6	46.6
GE 20000	50.6	52.7	52.8	52.8	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
GE 18000	50.6	52.7	52.8	52.8	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
GE 16000	50.6	52.7	52.8	52.8	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0	53.0
GE 14000	50.9	53.1	53.2	53.2	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4
GE 12000	52.3	54.6	54.7	54.7	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9
GE 10000	56.0	58.4	58.7	58.7	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1
GE 9000	56.3	58.9	59.1	59.1	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6	59.6
GE 8000	60.0	63.0	63.2	63.2	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7	63.7
GE 7000	61.4	64.4	65.0	65.0	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6	65.6
GE 6000	62.3	65.7	66.2	66.2	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8
GE 5000	65.8	69.4	70.0	70.0	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7	70.7
GE 4500	67.3	71.1	71.7	71.7	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
GE 4000	71.9	75.9	76.6	76.6	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
GE 3500	74.7	79.1	79.8	80.0	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8	80.8
GE 3000	78.6	83.2	83.9	84.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2	85.2
GE 2500	83.6	88.6	89.2	89.6	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7	90.7
GE 2000	84.8	90.3	91.0	91.3	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4	92.4
GE 1800	84.9	90.4	91.1	91.4	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6
GE 1500	85.6	91.2	92.0	92.3	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4
GE 1200	86.7	92.9	93.7	94.1	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2	95.2
GE 1000	87.0	93.8	94.8	95.7	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9	96.9
GE 900	87.3	94.3	95.6	96.4	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
GE 800	87.6	94.6	96.1	97.0	98.2	98.2	98.3	98.3	98.3	98.3	98.4	98.4	98.4	98.4	98.4	98.4
GE 700	87.7	94.7	96.2	97.1	98.4	98.4	98.6	98.6	98.6	98.6	98.7	98.7	98.7	98.7	98.7	98.7
GE 600	87.7	94.7	96.3	97.2	98.8	98.8	98.9	98.9	98.9	98.9	99.0	99.0	99.0	99.0	99.0	99.0
GE 500	87.9	94.9	96.6	97.8	99.3	99.3	99.4	99.4	99.4	99.4	99.6	99.6	99.6	99.6	99.6	99.6
GE 400	88.0	95.0	96.7	97.9	99.6	99.6	99.7	99.7	99.7	99.7	99.8	99.8	99.8	99.8	99.8	99.8
GE 300	88.0	95.0	96.7	98.0	99.8	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE 200	88.0	95.0	96.7	98.0	99.8	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	88.0	95.0	96.7	98.0	99.8	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0
GE 0	88.0	95.0	96.7	98.0	99.8	99.8	99.9	99.9	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: SEP HOURS(LST): 1800-2000

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	52.4	54.0	54.0	54.0	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1	54.1
GE 20000	56.0	57.7	57.7	57.7	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8
GE 18000	56.3	58.0	58.0	58.0	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
GE 16000	56.3	58.0	58.0	58.0	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
GE 14000	57.0	58.7	58.7	58.7	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8
GE 12000	58.2	59.9	59.9	59.9	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
GE 10000	61.4	63.2	63.2	63.2	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4
GE 9000	61.8	63.7	63.7	63.8	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
GE 8000	65.6	68.0	68.0	68.1	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3	68.3
GE 7000	66.6	69.1	69.1	69.3	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8
GE 6000	68.7	71.9	71.9	72.1	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6
GE 5000	72.9	76.3	76.3	76.6	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
GE 4500	74.9	78.3	78.3	78.6	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0
GE 4000	80.1	84.3	84.3	84.7	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1	85.1
GE 3500	81.8	86.2	86.2	86.6	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0	87.0
GE 3000	83.6	88.6	88.7	89.0	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4
GE 2500	85.6	91.0	91.2	91.6	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
GE 2000	86.4	92.4	92.7	93.0	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4
GE 1800	86.8	92.8	93.0	93.3	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8	93.8
GE 1500	87.1	93.1	93.3	93.7	94.1	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2	94.2
GE 1200	87.6	94.1	94.3	94.7	95.2	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3	95.3
GE 1000	88.1	95.0	95.6	95.9	96.4	96.6	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7	96.7
GE 900	88.6	95.4	96.0	96.3	97.0	97.1	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2	97.2
GE 800	88.6	95.7	96.6	96.9	97.6	97.7	97.9	97.9	97.9	98.0	98.0	98.0	98.0	98.0	98.0	98.0
GE 700	88.6	95.7	96.7	97.0	97.7	97.8	98.1	98.2	98.2	98.3	98.3	98.3	98.3	98.3	98.3	98.3
GE 600	88.7	95.8	96.8	97.1	98.0	98.1	98.6	98.7	98.7	98.8	98.8	98.8	98.8	98.8	98.8	98.8
GE 500	88.9	96.2	97.4	97.9	98.9	99.0	99.4	99.6	99.6	99.7	99.7	99.7	99.7	99.7	99.7	99.7
GE 400	88.9	96.2	97.4	97.9	99.0	99.1	99.6	99.8	99.8	99.9	99.9	99.9	99.9	99.9	99.9	99.9
GE 300	88.9	96.2	97.4	97.9	99.1	99.2	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 200	88.9	96.2	97.4	97.9	99.1	99.2	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 100	88.9	96.2	97.4	97.9	99.1	99.2	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0
GE 0	88.9	96.2	97.4	97.9	99.1	99.2	99.7	99.9	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86

MONTH: SEP

HOURS(IST): 2100-2300

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	61.9	62.4	62.9	62.9	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.3	63.3
GE 20000	65.2	66.0	66.4	66.4	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.9	66.9
GE 18000	65.2	66.0	66.4	66.4	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.9	66.9
GE 16000	65.2	66.0	66.4	66.4	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.9	66.9
GE 14000	65.6	66.3	66.8	66.8	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.0	67.2	67.2
GE 12000	66.3	67.1	67.6	67.6	67.8	67.8	67.8	67.8	67.8	67.8	67.8	67.8	67.8	67.8	68.0	68.0
GE 10000	70.0	70.9	71.3	71.3	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.8	71.8
GE 9000	70.6	71.4	71.9	71.9	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.1	72.3	72.3
GE 8000	72.7	73.7	74.1	74.1	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.6	74.6
GE 7000	73.4	74.6	75.0	75.0	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.4	75.7	75.7
GE 6000	75.0	76.3	76.8	76.8	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.4	77.4
GE 5000	79.2	80.9	81.6	81.6	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.0	82.2	82.2
GE 4500	80.7	82.3	83.0	83.0	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.4	83.7	83.7
GE 4000	83.4	85.2	85.9	85.9	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.3	86.6	86.6
GE 3500	84.3	86.1	86.8	86.8	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.2	87.4	87.4
GE 3000	85.3	87.3	88.1	88.1	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.8	88.8
GE 2500	86.9	89.0	89.9	89.9	90.4	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.8	90.8
GE 2000	87.7	90.1	91.0	91.0	91.6	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.9	91.9
GE 1800	88.0	90.7	91.6	91.6	92.1	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.4	92.4
GE 1500	88.3	91.0	92.0	92.1	92.7	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	92.8	93.0	93.0
GE 1200	89.0	91.8	93.0	93.1	93.7	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	93.9	94.1	94.1
GE 1000	89.2	92.4	93.7	93.9	94.4	94.7	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	95.0	95.0
GE 900	89.4	92.8	94.1	94.4	95.2	95.4	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.6	95.8	95.8
GE 800	89.7	93.1	94.8	95.1	96.0	96.2	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.3	96.6	96.6
GE 700	89.8	93.7	95.4	96.0	96.9	97.1	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.4	97.7	97.7
GE 600	89.8	94.2	96.0	96.6	97.4	97.7	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.2	98.2
GE 500	89.8	94.6	96.7	97.2	98.2	98.4	98.8	98.8	98.8	98.8	98.8	98.9	98.9	98.9	99.1	99.1
GE 400	89.8	95.0	97.1	97.7	98.7	98.9	99.2	99.2	99.2	99.2	99.3	99.3	99.4	99.4	99.7	99.7
GE 300	89.8	95.0	97.1	97.7	98.7	98.9	99.3	99.4	99.4	99.4	99.6	99.6	99.7	99.7	99.9	99.9
GE 200	89.8	95.0	97.1	97.8	98.8	99.0	99.4	99.6	99.6	99.6	99.7	99.7	99.8	99.8	100.0	100.0
GE 100	89.8	95.0	97.1	97.8	98.8	99.0	99.4	99.6	99.6	99.6	99.7	99.7	99.8	99.8	100.0	100.0
GE 0	89.8	95.0	97.1	97.8	98.8	99.0	99.4	99.6	99.6	99.6	99.7	99.7	99.8	99.8	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 900



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86

MONTH: SEP

HOURS(IST):

ALL

CEILING IN FEET	VISIBILITY IN STATUTE MILES																
	GE 1 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0	
NO CEIL	51.9	53.8	54.0	54.0	54.1	54.2	54.2	54.2	54.2	54.3	54.3	54.3	54.3	54.4	54.5	54.5	
GE 20000	55.8	58.0	58.2	58.3	58.4	58.4	58.4	58.5	58.5	58.5	58.5	58.5	58.6	58.6	58.7	58.8	
GE 18000	55.9	58.1	58.3	58.3	58.5	58.5	58.5	58.6	58.6	58.6	58.6	58.6	58.7	58.7	58.8	58.8	
GE 16000	55.9	58.1	58.3	58.3	58.5	58.5	58.5	58.6	58.6	58.6	58.6	58.6	58.7	58.7	58.8	58.8	
GE 14000	56.5	58.7	58.9	58.9	59.1	59.1	59.1	59.2	59.2	59.2	59.2	59.2	59.3	59.3	59.4	59.5	
GE 12000	57.8	60.1	60.3	60.3	60.5	60.5	60.5	60.6	60.6	60.6	60.6	60.6	60.7	60.7	60.8	60.8	
GE 10000	61.8	64.3	64.5	64.6	64.8	64.8	64.8	64.9	64.9	64.9	64.9	64.9	65.0	65.0	65.1	65.2	
GE 9000	62.2	64.8	65.0	65.1	65.3	65.3	65.3	65.4	65.4	65.4	65.4	65.4	65.5	65.5	65.6	65.7	
GE 8000	65.4	68.3	68.5	68.6	68.8	68.8	68.8	68.9	68.9	68.9	68.9	68.9	69.0	69.0	69.1	69.2	
GE 7000	66.8	69.7	70.0	70.1	70.4	70.4	70.4	70.5	70.5	70.5	70.5	70.6	70.6	70.7	70.7	70.8	
GE 6000	68.3	71.4	71.7	71.8	72.2	72.2	72.2	72.3	72.3	72.3	72.3	72.3	72.4	72.4	72.5	72.6	
GE 5000	71.5	74.9	75.3	75.4	75.8	75.8	75.9	75.9	75.9	75.9	76.0	76.0	76.0	76.1	76.2	76.2	
GE 4500	72.3	75.8	76.2	76.3	76.7	76.7	76.8	76.8	76.8	76.8	76.9	76.9	76.9	77.0	77.1	77.1	
GE 4000	75.6	79.5	79.8	80.0	80.4	80.4	80.5	80.5	80.5	80.6	80.6	80.6	80.6	80.7	80.8	80.8	
GE 3500	76.9	80.9	81.3	81.5	81.8	81.9	82.0	82.0	82.0	82.0	82.0	82.0	82.1	82.1	82.2	82.3	
GE 3000	79.7	84.0	84.5	84.7	85.2	85.2	85.3	85.3	85.3	85.4	85.4	85.4	85.5	85.5	85.6	85.6	
GE 2500	82.0	86.4	87.0	87.2	87.7	87.8	87.8	87.9	87.9	87.9	87.9	88.0	88.0	88.1	88.1	88.2	
GE 2000	83.5	88.2	88.8	89.0	89.5	89.6	89.7	89.8	89.8	89.8	89.8	89.8	89.9	89.9	90.0	90.1	
GE 1800	83.9	88.7	89.3	89.6	90.1	90.1	90.2	90.3	90.3	90.3	90.3	90.4	90.4	90.5	90.6	90.6	
GE 1500	84.8	89.8	90.4	90.8	91.3	91.4	91.5	91.5	91.5	91.6	91.6	91.6	91.7	91.7	91.8	91.8	
GE 1200	85.9	91.3	92.0	92.3	92.9	93.0	93.1	93.1	93.2	93.2	93.2	93.2	93.3	93.3	93.4	93.5	
GE 1000	86.8	92.4	93.2	93.6	94.2	94.3	94.5	94.5	94.5	94.6	94.6	94.6	94.7	94.7	94.8	94.8	
GE 900	87.2	93.0	93.9	94.3	95.0	95.1	95.2	95.3	95.3	95.3	95.4	95.4	95.4	95.5	95.6	95.6	
GE 800	87.5	93.5	94.5	95.1	95.8	96.0	96.2	96.2	96.2	96.3	96.3	96.3	96.4	96.4	96.5	96.6	
GE 700	87.8	94.1	95.2	95.8	96.7	96.8	97.1	97.2	97.2	97.2	97.3	97.3	97.3	97.4	97.5	97.5	
GE 600	87.9	94.3	95.5	96.2	97.1	97.3	97.6	97.7	97.8	97.8	97.8	97.9	97.9	98.0	98.0	98.1	
GE 500	88.0	94.6	95.9	96.8	97.8	98.0	98.3	98.5	98.5	98.6	98.6	98.7	98.7	98.8	98.8	98.9	
GE 400	88.0	94.8	96.1	97.1	98.2	98.4	98.8	99.0	99.1	99.2	99.2	99.2	99.3	99.3	99.4	99.5	
GE 300	88.0	94.8	96.2	97.2	98.4	98.6	99.0	99.4	99.4	99.5	99.5	99.6	99.7	99.7	99.8	99.9	
GE 200	88.0	94.8	96.2	97.2	98.4	98.7	99.1	99.4	99.4	99.6	99.6	99.6	99.7	99.8	99.9	99.9	
GE 100	88.0	94.8	96.2	97.2	98.4	98.7	99.1	99.4	99.4	99.6	99.6	99.6	99.8	99.8	99.9	100.0	
GE C	88.0	94.8	96.2	97.2	98.4	98.7	99.1	99.4	99.4	99.6	99.6	99.6	99.8	99.8	99.9	100.0	

TOTAL NUMBER OF OBSERVATIONS: 7200

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86

MONTH: OCT

HOURS(IST): 0000-0200

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	51.3	52.3	52.3	52.3	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.7	53.0
GE 20000	53.9	55.1	55.1	55.1	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.5	55.8
GE 18000	53.9	55.1	55.1	55.1	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.5	55.8
GE 16000	53.9	55.2	55.2	55.2	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.5	55.6	55.9
GE 14000	54.6	55.9	55.9	55.9	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.2	56.3	56.7
GE 12000	55.4	56.9	56.9	56.9	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.2	57.3	57.6
GE 10000	59.9	61.5	61.5	61.6	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	62.0	62.4
GE 9000	60.6	62.5	62.5	62.6	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	62.9	63.0	63.3
GE 8000	63.5	65.4	65.4	65.5	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.9	66.3
GE 7000	64.7	66.6	66.6	67.0	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.3	67.4	67.8
GE 6000	66.9	69.4	69.4	69.8	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.2	70.6
GE 5000	70.6	73.7	73.7	74.1	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.5	74.9
GE 4500	72.3	75.4	75.4	75.8	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.2	76.7
GE 4000	75.3	79.1	79.1	79.6	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	79.9	80.0	80.4
GE 3500	75.8	79.8	79.8	80.2	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.5	80.6	81.1
GE 3000	77.7	82.0	82.0	82.5	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	83.0	83.3
GE 2500	80.3	85.3	85.5	85.9	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.2	86.3	86.8
GE 2000	81.6	87.0	87.3	87.8	88.2	88.2	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.3	88.4	88.8
GE 1800	82.0	87.4	87.7	88.3	88.6	88.6	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.8	89.2
GE 1500	83.5	89.0	89.7	90.2	90.5	90.5	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.6	90.8	91.2
GE 1200	84.2	91.2	91.8	92.4	92.7	92.7	92.8	92.8	92.8	92.8	92.9	92.9	92.9	92.9	93.0	93.4
GE 1000	84.2	91.3	91.9	92.6	93.0	93.0	93.1	93.1	93.1	93.2	93.3	93.3	93.3	93.3	93.4	93.9
GE 900	84.4	92.0	92.8	93.4	93.9	93.9	94.0	94.0	94.0	94.1	94.2	94.2	94.2	94.2	94.3	94.7
GE 800	84.5	92.4	93.1	93.8	94.2	94.2	94.3	94.3	94.3	94.4	94.5	94.5	94.5	94.5	94.6	95.1
GE 700	84.8	92.8	93.8	94.4	95.1	95.1	95.4	95.4	95.4	95.5	95.6	95.6	95.6	95.6	95.7	96.1
GE 600	85.1	93.3	94.3	95.2	96.0	96.0	96.3	96.3	96.3	96.5	96.6	96.6	96.6	96.6	96.7	97.1
GE 500	85.4	93.8	94.9	95.8	97.1	97.1	97.8	98.1	98.1	98.3	98.4	98.4	98.4	98.4	98.5	98.9
GE 400	85.4	93.9	95.1	95.9	97.2	97.2	98.0	98.2	98.2	98.4	98.5	98.5	98.5	98.5	98.6	99.0
GE 300	85.5	94.0	95.2	96.3	97.6	97.6	98.4	98.6	98.9	99.1	99.2	99.2	99.2	99.2	99.4	99.8
GE 200	85.5	94.0	95.2	96.3	97.6	97.6	98.4	98.6	98.9	99.2	99.4	99.4	99.4	99.4	99.5	99.9
GE 100	85.5	94.0	95.2	96.3	97.6	97.6	98.4	98.6	98.9	99.2	99.4	99.4	99.4	99.4	99.5	99.9
GE 01	85.5	94.0	95.2	96.3	97.6	97.6	98.4	98.6	98.9	99.2	99.4	99.4	99.4	99.4	99.5	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: OCT HOURS(IST): 0300-0500

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	51.2	52.0	52.2	52.3	52.4	52.4	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.5	52.7	52.9
GE 20000	54.5	55.6	55.7	55.8	55.9	55.9	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.2	56.5
GE 18000	54.5	55.6	55.7	55.8	55.9	55.9	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.2	56.5
GE 16000	54.6	55.7	55.8	55.9	56.0	56.0	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.1	56.3	56.6
GE 14000	55.1	56.1	56.2	56.3	56.5	56.5	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.6	56.8	57.0
GE 12000	56.3	57.6	57.7	57.8	58.0	58.0	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.3	58.5
GE 10000	59.9	61.7	61.8	61.9	62.0	62.0	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.4	62.6
GE 9000	60.3	62.2	62.3	62.5	62.6	62.6	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.9	63.1
GE 8000	62.0	63.9	64.0	64.2	64.3	64.3	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.4	64.6	64.8
GE 7000	64.1	65.9	66.0	66.2	66.3	66.3	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.7	66.9
GE 6000	65.9	67.8	68.0	68.6	68.7	68.7	68.8	68.8	68.8	68.8	68.8	68.8	68.8	68.8	69.0	69.2
GE 5000	68.6	71.0	71.1	71.7	71.8	71.8	71.9	71.9	71.9	71.9	71.9	71.9	71.9	71.9	72.2	72.4
GE 4500	69.8	72.2	72.3	72.9	73.0	73.0	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.1	73.3	73.5
GE 4000	73.8	76.9	77.2	77.8	78.0	78.0	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.1	78.3	78.5
GE 3500	74.1	77.5	78.0	78.6	78.7	78.7	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	79.0	79.2
GE 3000	76.9	80.3	80.9	81.6	81.7	81.7	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8	82.0	82.3
GE 2500	79.5	83.3	83.9	84.7	84.8	84.8	84.9	84.9	84.9	84.9	84.9	84.9	84.9	84.9	85.2	85.4
GE 2000	81.0	85.4	86.0	86.9	87.0	87.0	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.1	87.4	87.6
GE 1800	81.3	85.7	86.5	87.3	87.5	87.5	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	88.0	88.2
GE 1500	82.8	87.2	88.0	89.0	89.2	89.2	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.7	89.9
GE 1200	83.9	88.5	89.2	90.4	90.6	90.6	90.8	90.9	90.9	90.9	90.9	91.0	91.0	91.0	91.2	91.4
GE 1000	84.2	88.9	89.7	91.0	91.3	91.3	91.4	91.5	91.5	91.6	91.7	91.7	91.7	91.7	91.9	92.2
GE 900	84.6	89.9	90.6	91.9	92.4	92.4	92.5	92.6	92.6	92.7	92.9	92.9	92.9	92.9	93.1	93.3
GE 800	85.2	91.2	91.9	93.2	93.7	93.7	93.8	93.9	93.9	94.0	94.2	94.2	94.2	94.2	94.4	94.6
GE 700	85.7	92.0	93.0	94.4	94.8	94.8	95.1	95.2	95.2	95.3	95.5	95.5	95.5	95.5	95.7	95.9
GE 600	85.9	92.6	93.7	95.1	95.8	95.8	96.1	96.2	96.2	96.3	96.6	96.6	96.6	96.6	96.8	97.0
GE 500	86.0	93.1	94.4	96.0	96.9	96.9	97.2	97.6	97.6	97.7	98.0	98.0	98.0	98.0	98.2	98.4
GE 400	86.0	93.1	94.4	96.0	97.2	97.2	97.5	98.0	98.0	98.1	98.3	98.3	98.3	98.3	98.5	98.7
GE 300	86.0	93.2	94.5	96.6	97.7	97.7	98.1	98.5	98.7	99.0	99.2	99.2	99.2	99.2	99.5	99.7
GE 200	86.0	93.3	94.6	96.7	97.8	97.8	98.2	98.6	98.8	99.1	99.4	99.4	99.4	99.4	99.6	99.8
GE 100	86.0	93.3	94.6	96.7	97.8	97.8	98.2	98.6	98.8	99.1	99.4	99.4	99.4	99.4	99.6	99.8
GE	CI 86.0	93.3	94.6	96.7	97.8	97.8	98.2	98.6	98.8	99.2	99.5	99.5	99.5	99.5	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86

MONTH: OCT

HOURS(IST): 0600-0800

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	45.8	48.4	49.4	49.8	50.0	50.0	50.1	50.1	50.1	50.4	50.5	50.5	50.6	50.8	51.0	51.0
GE 20000	49.4	51.9	52.9	53.3	53.5	53.5	53.7	53.7	53.7	54.0	54.1	54.1	54.2	54.3	54.5	54.5
GE 18000	49.4	51.9	52.9	53.3	53.5	53.5	53.7	53.7	53.7	54.0	54.1	54.1	54.2	54.3	54.5	54.5
GE 16000	49.4	51.9	52.9	53.3	53.5	53.5	53.7	53.7	53.7	54.0	54.1	54.1	54.2	54.3	54.5	54.5
GE 14000	49.6	52.2	53.1	53.5	53.8	53.8	53.9	53.9	53.9	54.2	54.3	54.3	54.4	54.5	54.7	54.7
GE 12000	50.9	53.5	54.5	55.1	55.3	55.3	55.4	55.4	55.4	55.7	55.8	55.8	55.9	56.0	56.2	56.2
GE 10000	55.7	58.6	59.7	60.2	60.4	60.4	60.5	60.5	60.5	60.9	61.0	61.0	61.1	61.2	61.4	61.4
GE 9000	55.9	58.8	59.9	60.4	60.6	60.6	60.8	60.8	60.8	61.1	61.2	61.2	61.3	61.4	61.6	61.6
GE 8000	58.5	61.4	62.5	63.0	63.2	63.2	63.3	63.3	63.3	63.7	63.8	63.8	63.9	64.0	64.2	64.2
GE 7000	60.0	63.0	64.1	64.6	64.8	64.8	64.9	64.9	64.9	65.3	65.4	65.4	65.5	65.6	65.8	65.8
GE 6000	61.1	64.1	65.2	65.8	66.0	66.0	66.3	66.3	66.3	66.7	66.8	66.8	67.0	67.1	67.3	67.3
GE 5000	63.9	67.2	68.3	68.9	69.4	69.4	69.7	69.7	69.7	70.0	70.1	70.1	70.3	70.4	70.6	70.6
GE 4500	65.3	68.6	69.7	70.3	70.8	70.8	71.1	71.1	71.1	71.4	71.5	71.5	71.7	71.8	72.0	72.0
GE 4000	67.5	71.1	72.2	72.9	73.3	73.3	73.7	73.7	73.7	74.0	74.1	74.1	74.3	74.4	74.6	74.6
GE 3500	68.1	71.9	73.1	73.9	74.3	74.3	74.6	74.6	74.6	74.9	75.1	75.1	75.3	75.4	75.6	75.6
GE 3000	71.4	75.7	76.9	77.8	78.3	78.3	78.6	78.6	78.6	78.9	79.0	79.0	79.2	79.4	79.6	79.6
GE 2500	73.4	78.3	79.8	80.8	81.4	81.4	81.8	81.8	81.8	82.2	82.3	82.3	82.5	82.6	82.8	82.8
GE 2000	75.1	80.9	82.5	83.5	84.4	84.4	84.8	84.8	84.8	85.2	85.3	85.3	85.5	85.6	85.8	85.8
GE 1800	75.4	81.2	82.8	84.1	85.1	85.1	85.5	85.5	85.5	85.8	85.9	85.9	86.1	86.2	86.5	86.5
GE 1500	76.2	82.5	84.4	85.8	86.8	86.8	87.4	87.4	87.4	87.7	87.8	87.8	88.1	88.2	88.4	88.4
GE 1200	77.4	84.2	86.1	87.5	88.5	88.5	89.1	89.1	89.1	89.5	89.6	89.6	89.8	89.9	90.1	90.1
GE 1000	78.1	85.4	87.3	88.7	89.8	89.9	90.5	90.5	90.5	90.9	91.0	91.0	91.2	91.3	91.5	91.5
GE 900	78.4	86.6	88.6	90.2	91.5	91.6	92.3	92.4	92.4	92.7	92.8	92.8	93.0	93.1	93.3	93.3
GE 800	78.7	87.8	89.9	91.6	93.0	93.1	93.8	93.9	93.9	94.2	94.3	94.3	94.6	94.7	94.9	94.9
GE 700	78.8	88.2	90.2	92.2	93.5	93.7	94.5	94.6	94.6	94.9	95.1	95.1	95.4	95.5	95.7	95.7
GE 600	79.2	88.9	91.0	93.0	94.4	94.6	95.6	95.7	95.7	96.0	96.1	96.1	96.5	96.6	96.8	96.8
GE 500	79.2	89.0	91.1	93.4	94.9	95.2	96.2	96.5	96.5	97.0	97.1	97.1	97.4	97.6	97.8	98.0
GE 400	79.2	89.4	91.4	93.8	95.5	95.8	97.2	97.4	97.5	98.1	98.2	98.2	98.5	98.7	98.9	99.0
GE 300	79.2	89.4	91.6	94.0	95.8	96.1	97.5	97.7	97.8	98.5	98.7	98.7	99.2	99.5	99.7	99.8
GE 200	79.2	89.4	91.6	94.0	95.8	96.1	97.5	97.7	97.8	98.5	98.8	98.8	99.4	99.6	99.8	99.9
GE 100	79.2	89.4	91.6	94.0	95.8	96.1	97.5	97.7	97.8	98.5	98.8	98.8	99.4	99.6	99.8	99.9
GE 01	79.2	89.4	91.6	94.0	95.8	96.1	97.5	97.7	97.8	98.5	98.9	98.9	99.5	99.7	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: OCT HOURS(LST): 0900-1100

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	40.1	41.9	42.4	42.9	43.1	43.1	43.1	43.2	43.2	43.3	43.3	43.3	43.3	43.3	43.3	43.3
GE 20000	46.1	48.7	49.1	49.7	49.9	49.9	49.9	50.0	50.0	50.1	50.1	50.1	50.1	50.1	50.1	50.1
GE 18000	46.2	48.9	49.4	49.9	50.1	50.1	50.1	50.2	50.2	50.3	50.3	50.3	50.3	50.3	50.3	50.3
GE 16000	46.6	49.2	49.7	50.2	50.4	50.4	50.4	50.5	50.5	50.6	50.6	50.6	50.6	50.6	50.6	50.6
GE 14000	47.7	50.5	51.0	51.5	51.7	51.7	51.7	51.8	51.8	51.9	51.9	51.9	51.9	51.9	51.9	51.9
GE 12000	49.1	52.3	52.7	53.2	53.4	53.4	53.4	53.5	53.5	53.7	53.7	53.7	53.7	53.7	53.7	53.7
GE 10000	52.8	56.5	56.9	57.4	57.6	57.6	57.6	57.7	57.7	57.8	57.8	57.8	57.8	57.8	57.8	57.8
GE 9000	53.3	57.0	57.4	58.0	58.2	58.2	58.2	58.3	58.3	58.4	58.4	58.4	58.4	58.4	58.4	58.4
GE 8000	56.7	60.4	60.9	61.4	61.6	61.6	61.6	61.7	61.7	61.8	61.8	61.8	61.8	61.8	61.8	61.8
GE 7000	58.3	62.2	62.6	63.1	63.3	63.3	63.3	63.4	63.4	63.5	63.5	63.5	63.5	63.5	63.5	63.5
GE 6000	60.1	64.2	64.6	65.2	65.4	65.4	65.4	65.5	65.5	65.6	65.6	65.6	65.6	65.6	65.6	65.6
GE 5000	61.9	66.3	66.8	67.3	67.7	67.7	67.7	67.8	67.8	68.0	68.0	68.0	68.0	68.0	68.0	68.0
GE 4500	62.9	67.3	67.8	68.4	68.8	68.8	68.8	68.9	68.9	69.0	69.0	69.0	69.0	69.0	69.0	69.0
GE 4000	65.6	70.9	71.4	72.0	72.5	72.5	72.5	72.7	72.7	72.8	72.8	72.8	72.8	72.8	72.8	72.8
GE 3500	65.9	71.3	71.8	72.5	72.9	72.9	72.9	73.1	73.1	73.2	73.2	73.2	73.2	73.2	73.2	73.2
GE 3000	69.6	75.4	76.1	76.9	77.3	77.3	77.3	77.5	77.5	77.6	77.6	77.6	77.6	77.6	77.6	77.6
GE 2500	71.5	78.0	79.0	79.8	80.2	80.2	80.2	80.4	80.4	80.5	80.5	80.5	80.5	80.5	80.5	80.5
GE 2000	73.4	80.5	81.8	82.7	83.1	83.1	83.1	83.3	83.3	83.4	83.4	83.4	83.4	83.4	83.4	83.4
GE 1800	73.7	80.9	82.2	83.0	83.7	83.7	83.7	83.9	83.9	84.0	84.0	84.0	84.0	84.0	84.0	84.0
GE 1500	74.1	81.8	83.4	84.4	85.2	85.2	85.3	85.5	85.5	85.6	85.6	85.6	85.6	85.6	85.6	85.6
GE 1200	75.1	83.5	85.2	86.2	87.1	87.1	87.2	87.5	87.6	87.7	87.7	87.7	87.7	87.7	87.7	87.7
GE 1000	75.9	85.6	87.3	88.6	89.9	90.0	90.1	90.5	90.6	90.9	90.9	90.9	90.9	90.9	90.9	90.9
GE 900	76.2	86.9	88.6	90.0	91.4	91.5	91.6	92.0	92.2	92.4	92.5	92.5	92.5	92.5	92.5	92.5
GE 800	76.8	87.6	89.6	91.1	92.5	92.6	92.8	93.3	93.5	93.9	94.0	94.0	94.0	94.0	94.0	94.0
GE 700	77.0	88.2	90.3	91.9	93.3	93.4	93.8	94.4	94.6	95.2	95.3	95.3	95.3	95.3	95.3	95.3
GE 600	77.0	88.8	91.0	93.0	94.8	94.9	95.5	96.2	96.5	97.0	97.1	97.1	97.1	97.1	97.1	97.2
GE 500	77.0	88.8	91.0	93.1	95.3	95.5	96.2	97.0	97.3	98.1	98.2	98.2	98.2	98.2	98.2	98.3
GE 400	77.0	88.9	91.1	93.2	95.4	95.6	96.5	97.4	97.7	98.4	98.9	98.9	99.0	99.0	99.0	99.1
GE 300	77.0	88.9	91.1	93.5	95.7	95.9	97.1	98.1	98.4	99.6	99.7	99.7	99.9	99.9	99.9	100.0
GE 200	77.0	88.9	91.1	93.5	95.7	95.9	97.1	98.1	98.4	99.6	99.7	99.7	99.9	99.9	99.9	100.0
GE 100	77.0	88.9	91.1	93.5	95.7	95.9	97.1	98.1	98.4	99.6	99.7	99.7	99.9	99.9	99.9	100.0
GE CI	77.0	88.9	91.1	93.5	95.7	95.9	97.1	98.1	98.4	99.6	99.7	99.7	99.9	99.9	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86

MONTH: OCT HOURS(IST): 1200-1400

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	40.6	42.4	42.7	42.8	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9
GE 20000	47.3	49.7	50.0	50.2	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3
GE 18000	47.6	50.0	50.3	50.5	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.6
GE 16000	47.7	50.1	50.4	50.6	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8
GE 14000	48.6	51.2	51.5	51.7	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8	51.8
GE 12000	50.1	53.2	53.5	53.8	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9
GE 10000	54.0	57.4	57.7	58.0	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1	58.1
GE 9000	54.4	57.8	58.2	58.4	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5
GE 8000	56.2	59.8	60.1	60.3	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4
GE 7000	57.6	61.7	62.0	62.3	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4
GE 6000	59.0	63.3	63.7	63.9	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
GE 5000	61.1	65.4	65.7	65.9	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0
GE 4500	61.3	65.8	66.1	66.3	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5	66.5
GE 4000	64.4	69.1	69.6	69.8	70.0	70.0	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1	70.1
GE 3500	65.8	70.6	71.1	71.3	71.5	71.5	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6	71.6
GE 3000	69.8	75.3	75.8	76.0	76.2	76.2	76.3	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5
GE 2500	73.0	79.2	79.8	80.1	80.4	80.4	80.5	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6	80.6
GE 2000	74.6	82.2	82.9	83.3	83.7	83.7	83.8	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9	83.9
GE 1800	75.1	82.8	83.5	84.0	84.3	84.3	84.4	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5	84.5
GE 1500	76.8	85.4	86.6	87.1	87.4	87.4	87.5	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6	87.6
GE 1200	78.6	88.1	89.7	90.2	90.6	90.6	90.9	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0	91.0
GE 1000	79.0	89.7	91.4	92.0	92.8	92.8	93.4	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5
GE 900	79.6	91.1	93.1	93.8	94.8	94.8	95.5	95.7	95.7	95.8	95.8	95.8	95.8	95.8	95.8	95.8
GE 800	79.6	91.4	93.5	94.2	95.4	95.5	96.3	96.7	96.7	96.8	96.8	96.8	96.8	96.8	96.8	96.8
GE 700	79.6	91.4	93.7	94.6	95.9	96.0	96.9	97.2	97.2	97.3	97.3	97.3	97.3	97.3	97.3	97.3
GE 600	79.6	91.7	94.0	94.9	96.3	96.5	97.3	97.7	97.8	98.0	98.0	98.0	98.0	98.0	98.0	98.0
GE 500	79.6	91.7	94.0	94.9	96.5	96.6	97.7	98.4	98.6	98.7	98.7	98.7	98.7	98.8	98.8	98.8
GE 400	79.6	91.7	94.0	94.9	96.5	96.6	97.8	98.5	98.7	99.0	99.0	99.0	99.0	99.4	99.4	99.4
GE 300	79.6	91.7	94.0	94.9	96.6	96.6	98.0	98.6	98.8	99.2	99.2	99.2	99.2	99.9	99.9	99.9
GE 200	79.6	91.7	94.0	94.9	96.6	96.7	98.0	98.6	98.8	99.2	99.2	99.2	99.2	100.0	100.0	100.0
GE 100	79.6	91.7	94.0	94.9	96.6	96.7	98.0	98.6	98.8	99.2	99.2	99.2	99.2	100.0	100.0	100.0
GE 0	79.6	91.7	94.0	94.9	96.6	96.7	98.0	98.6	98.8	99.2	99.2	99.2	99.2	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: OCT HOURS(IST): 1500-1700

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2	GE 1 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	42.6	44.1	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4	44.4
GE 20000	46.7	48.6	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
GE 18000	47.5	49.5	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9
GE 16000	47.7	49.7	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.1
GE 14000	48.9	51.3	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7
GE 12000	51.1	53.9	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3
GE 10000	54.9	58.6	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1
GE 9000	55.8	59.5	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
GE 8000	57.6	61.3	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8	61.8
GE 7000	58.7	62.7	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2	63.2
GE 6000	59.6	63.5	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1	64.1
GE 5000	62.8	67.2	67.8	67.8	68.0	68.0	68.0	68.0	68.0	68.0	68.1	68.1	68.1	68.1	68.1	68.1
GE 4500	63.8	68.4	69.0	69.0	69.1	69.1	69.1	69.1	69.1	69.1	69.2	69.2	69.2	69.2	69.2	69.2
GE 4000	68.4	73.2	74.1	74.3	74.5	74.5	74.5	74.6	74.6	74.6	74.7	74.7	74.7	74.7	74.7	74.7
GE 3500	69.8	74.6	75.6	75.8	76.0	76.0	76.1	76.1	76.1	76.1	76.2	76.2	76.2	76.2	76.2	76.2
GE 3000	72.7	78.1	79.0	79.2	79.7	79.7	79.7	79.8	79.8	79.8	79.9	79.9	79.9	79.9	79.9	79.9
GE 2500	75.6	82.0	83.0	83.2	83.7	83.7	83.8	83.8	83.8	83.8	83.9	83.9	83.9	83.9	83.9	83.9
GE 2000	78.2	85.5	86.7	87.1	87.6	88.0	88.1	88.1	88.1	88.1	88.3	88.4	88.4	88.4	88.4	88.4
GE 1800	78.7	86.1	87.3	88.0	88.5	88.8	88.9	88.9	88.9	88.9	89.1	89.2	89.2	89.2	89.2	89.2
GE 1500	79.9	88.8	90.1	90.9	91.4	91.7	91.8	91.8	91.8	91.8	92.0	92.2	92.2	92.2	92.2	92.2
GE 1200	81.1	90.4	92.0	93.0	93.9	94.2	94.3	94.3	94.3	94.3	94.5	94.6	94.6	94.6	94.6	94.6
GE 1000	81.3	90.9	92.7	93.9	94.8	95.3	95.6	95.6	95.6	95.6	95.8	95.9	95.9	95.9	95.9	95.9
GE 900	81.5	91.4	93.2	94.4	95.4	95.8	96.1	96.1	96.1	96.1	96.5	96.6	96.6	96.6	96.6	96.6
GE 800	81.5	91.8	93.7	94.9	96.0	96.6	97.0	97.0	97.0	97.0	97.3	97.4	97.4	97.4	97.4	97.4
GE 700	81.5	91.8	93.8	95.1	96.2	96.8	97.3	97.4	97.4	97.4	97.7	97.8	97.8	97.8	97.8	97.8
GE 600	81.5	91.8	93.8	95.1	96.5	97.0	97.6	97.7	97.7	97.7	98.1	98.2	98.3	98.3	98.3	98.3
GE 500	81.5	92.0	94.1	95.5	97.0	97.5	98.4	98.8	98.8	98.8	99.5	99.7	99.8	99.9	99.9	99.9
GE 400	81.5	92.0	94.1	95.5	97.0	97.5	98.4	98.9	98.9	98.9	99.6	99.8	99.9	100.0	100.0	100.0
GE 300	81.5	92.0	94.1	95.5	97.0	97.5	98.4	98.9	98.9	98.9	99.6	99.8	99.9	100.0	100.0	100.0
GE 200	81.5	92.0	94.1	95.5	97.0	97.5	98.4	98.9	98.9	98.9	99.6	99.8	99.9	100.0	100.0	100.0
GE 100	81.5	92.0	94.1	95.5	97.0	97.5	98.4	98.9	98.9	98.9	99.6	99.8	99.9	100.0	100.0	100.0
GE 0	81.5	92.0	94.1	95.5	97.0	97.5	98.4	98.9	98.9	98.9	99.6	99.8	99.9	100.0	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: OCT HOURS(LST): 1800-2000

CEILING IN FEET	VISIBILITY IN STATUTE MILES																	
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0		
NO CEIL	46.2	48.2	48.3	48.4	48.5	48.5	48.5	48.5	48.5	48.6	48.6	48.6	48.6	48.6	48.6	48.6		
GE 20000	51.1	53.1	53.2	53.3	53.4	53.4	53.4	53.4	53.4	53.5	53.5	53.5	53.5	53.5	53.5	53.5		
GE 18000	51.2	53.2	53.3	53.4	53.5	53.5	53.5	53.5	53.5	53.7	53.7	53.7	53.7	53.7	53.7	53.7		
GE 16000	51.2	53.2	53.3	53.4	53.5	53.5	53.5	53.5	53.5	53.7	53.7	53.7	53.7	53.7	53.7	53.7		
GE 14000	52.6	54.7	54.8	54.9	55.1	55.1	55.1	55.1	55.1	55.2	55.2	55.2	55.2	55.2	55.2	55.2		
GE 12000	55.2	57.3	57.4	57.5	57.6	57.6	57.6	57.6	57.6	57.7	57.7	57.7	57.7	57.7	57.7	57.7		
GE 10000	59.0	61.8	61.9	62.0	62.2	62.2	62.2	62.2	62.2	62.3	62.3	62.3	62.3	62.3	62.3	62.3		
GE 9000	59.9	63.0	63.1	63.2	63.3	63.3	63.3	63.3	63.3	63.4	63.4	63.4	63.4	63.4	63.4	63.4		
GE 8000	62.0	65.3	65.4	65.5	65.6	65.6	65.6	65.6	65.6	65.7	65.7	65.7	65.7	65.7	65.7	65.7		
GE 7000	64.3	67.7	67.8	68.0	68.1	68.1	68.1	68.1	68.1	68.2	68.2	68.2	68.2	68.2	68.2	68.2		
GE 6000	64.9	68.6	68.7	68.8	68.9	68.9	68.9	68.9	68.9	69.0	69.0	69.0	69.0	69.0	69.0	69.0		
GE 5000	68.1	72.2	72.3	72.4	72.5	72.5	72.5	72.5	72.5	72.6	72.6	72.6	72.6	72.6	72.6	72.6		
GE 4500	69.1	73.2	73.3	73.4	73.5	73.5	73.5	73.5	73.5	73.7	73.7	73.7	73.7	73.7	73.7	73.7		
GE 4000	72.8	76.9	77.0	77.3	77.4	77.4	77.4	77.5	77.6	77.6	77.7	77.7	77.7	77.7	77.7	77.7		
GE 3500	75.8	78.0	78.4	78.7	78.8	78.8	78.9	79.0	79.0	79.1	79.1	79.1	79.1	79.1	79.1	79.1		
GE 3000	75.5	80.0	80.4	81.1	81.3	81.3	81.4	81.5	81.5	81.6	81.6	81.6	81.6	81.6	81.6	81.6		
GE 2500	78.3	84.0	84.4	85.1	85.3	85.3	85.4	85.5	85.5	85.6	85.6	85.6	85.6	85.6	85.6	85.6		
GE 2000	79.9	86.9	87.8	88.9	89.1	89.2	89.4	89.5	89.5	89.6	89.6	89.6	89.6	89.6	89.6	89.6		
GE 1800	80.3	87.4	88.4	89.6	89.8	90.0	90.1	90.2	90.2	90.3	90.3	90.3	90.3	90.3	90.3	90.3		
GE 1500	80.8	88.3	89.2	90.5	90.8	91.0	91.2	91.4	91.4	91.5	91.6	91.6	91.6	91.6	91.6	91.6		
GE 1200	81.6	89.5	90.8	92.2	92.6	92.8	93.0	93.2	93.2	93.3	93.4	93.4	93.4	93.4	93.4	93.4		
GE 1000	81.6	90.1	91.5	93.3	94.2	94.4	94.8	95.1	95.1	95.2	95.3	95.3	95.3	95.3	95.3	95.3		
GE 900	81.8	90.4	92.0	94.1	94.9	95.2	95.6	95.8	95.8	95.9	96.0	96.0	96.0	96.0	96.0	96.0		
GE 800	81.8	90.4	92.2	94.3	95.2	95.4	95.8	96.1	96.1	96.2	96.5	96.5	96.5	96.5	96.5	96.5		
GE 700	81.8	90.5	92.4	94.6	95.5	95.7	96.3	97.0	97.0	97.1	97.3	97.3	97.3	97.3	97.3	97.3		
GE 600	81.8	90.9	92.8	95.1	96.0	96.2	96.9	97.5	97.5	97.6	97.8	97.8	97.8	97.8	97.8	97.8		
GE 500	82.0	91.4	93.5	95.8	96.8	97.0	98.0	98.7	98.7	98.8	99.0	99.0	99.0	99.0	99.0	99.0		
GE 400	82.0	91.6	93.8	96.0	97.1	97.3	98.4	99.1	99.1	99.2	99.5	99.5	99.5	99.5	99.5	99.5		
GE 300	82.0	91.6	93.8	96.0	97.1	97.3	98.6	99.5	99.5	99.6	99.9	99.9	99.9	99.9	99.9	99.9		
GE 200	82.0	91.6	93.8	96.0	97.1	97.3	98.6	99.6	99.6	99.7	100.0	100.0	100.0	100.0	100.0	100.0		
GE 100	82.0	91.6	93.8	96.0	97.1	97.3	98.6	99.6	99.6	99.7	100.0	100.0	100.0	100.0	100.0	100.0		
GE 0	82.0	91.6	93.8	96.0	97.1	97.3	98.6	99.6	99.6	99.7	100.0	100.0	100.0	100.0	100.0	100.0		

TOTAL NUMBER OF OBSERVATIONS: 930



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: OCT HOURS(IST): 2100-2300

CEILING IN FEET	VISIBILITY IN STATUTE MILES														
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	48.4	49.4	49.4	49.4	49.6	49.6	49.6	49.6	49.6	49.7	49.9	49.9	49.9	49.9	50.0
GE 20000	53.4	54.4	54.4	54.4	54.6	54.6	54.6	54.6	54.6	54.7	54.9	54.9	54.9	54.9	55.1
GE 18000	53.4	54.4	54.4	54.4	54.6	54.6	54.6	54.6	54.6	54.7	54.9	54.9	54.9	54.9	55.1
GE 16000	53.5	54.6	54.6	54.6	54.8	54.8	54.8	54.8	54.8	54.9	55.2	55.2	55.2	55.2	55.3
GE 14000	54.0	55.2	55.2	55.3	55.5	55.5	55.5	55.5	55.5	55.6	55.8	55.8	55.8	55.8	55.9
GE 12000	55.7	57.0	57.0	57.1	57.3	57.3	57.3	57.3	57.3	57.4	57.6	57.6	57.6	57.6	57.7
GE 10000	59.6	61.4	61.4	61.5	61.9	61.9	61.9	61.9	61.9	62.0	62.3	62.3	62.3	62.3	62.4
GE 9000	60.8	62.9	62.9	63.0	63.4	63.4	63.4	63.4	63.4	63.5	63.8	63.8	63.8	63.8	63.9
GE 8000	62.6	64.7	64.7	64.8	65.3	65.3	65.3	65.3	65.3	65.4	65.6	65.6	65.6	65.6	65.7
GE 7000	64.5	66.9	66.9	67.0	67.4	67.4	67.4	67.4	67.4	67.5	67.7	67.7	67.7	67.7	67.8
GE 6000	66.1	68.8	68.8	68.9	69.4	69.4	69.4	69.4	69.4	69.5	69.7	69.7	69.7	69.7	69.8
GE 5000	69.1	71.9	71.9	72.0	72.5	72.5	72.5	72.5	72.5	72.6	72.8	72.8	72.8	72.8	72.9
GE 4500	69.7	72.5	72.5	72.6	73.0	73.0	73.0	73.0	73.0	73.1	73.3	73.3	73.3	73.3	73.4
GE 4000	74.8	78.0	78.2	78.5	78.9	78.9	79.0	79.0	79.0	79.2	79.5	79.5	79.5	79.5	79.6
GE 3500	75.5	78.9	79.1	79.5	79.9	79.9	80.0	80.0	80.0	80.2	80.4	80.4	80.4	80.4	80.5
GE 3000	77.6	81.4	81.6	82.0	82.6	82.6	82.7	82.7	82.7	82.9	83.1	83.1	83.1	83.1	83.2
GE 2500	80.3	85.4	85.6	86.2	86.9	86.9	87.0	87.0	87.0	87.2	87.4	87.4	87.4	87.4	87.5
GE 2000	81.8	87.8	88.1	88.7	89.4	89.4	89.5	89.5	89.5	89.7	89.9	89.9	89.9	89.9	90.0
GE 1800	82.2	88.6	88.8	89.6	90.3	90.3	90.4	90.4	90.4	90.6	90.9	90.9	90.9	90.9	91.0
GE 1500	82.8	89.4	89.6	90.3	91.1	91.1	91.2	91.2	91.2	91.4	91.7	91.7	91.7	91.7	91.8
GE 1200	83.3	90.2	90.4	91.3	92.3	92.3	92.4	92.5	92.5	92.7	93.0	93.0	93.0	93.0	93.1
GE 1000	83.5	90.5	90.9	91.9	93.2	93.2	93.3	93.5	93.5	93.8	94.1	94.1	94.1	94.1	94.2
GE 900	84.1	91.4	92.2	93.2	94.5	94.5	94.6	94.8	94.8	95.1	95.4	95.4	95.4	95.4	95.5
GE 800	84.1	91.4	92.2	93.2	94.6	94.6	94.8	95.1	95.1	95.3	95.6	95.6	95.6	95.6	95.7
GE 700	84.1	91.5	92.5	93.7	95.1	95.1	95.3	95.6	95.6	95.8	96.1	96.1	96.1	96.1	96.2
GE 600	84.3	92.0	93.1	94.6	96.2	96.3	96.6	97.1	97.1	97.3	97.6	97.6	97.6	97.6	97.7
GE 500	84.3	92.0	93.2	94.7	96.3	96.7	97.0	97.7	97.7	98.1	98.4	98.4	98.4	98.4	98.5
GE 400	84.4	92.2	93.3	94.8	96.5	96.8	97.1	98.2	98.3	98.7	99.0	99.0	99.0	99.0	99.1
GE 300	84.4	92.5	93.7	95.2	96.8	97.1	97.4	98.5	98.6	99.1	99.5	99.5	99.5	99.5	99.6
GE 200	84.4	92.5	93.7	95.2	96.8	97.1	97.4	98.5	98.7	99.2	99.6	99.6	99.6	99.6	99.7
GE 100	84.4	92.5	93.7	95.2	96.8	97.1	97.4	98.5	98.7	99.2	99.6	99.6	99.6	99.6	99.7
GE 0	84.4	92.5	93.7	95.2	96.8	97.1	97.4	98.5	98.7	99.2	99.6	99.6	99.6	99.6	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: OCT HOURS(IST): ALL

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	45.8	47.3	47.6	47.8	47.9	47.9	48.0	48.0	48.0	48.1	48.1	48.1	48.1	48.1	48.2	48.3
GE 20000	50.3	52.1	52.4	52.6	52.8	52.8	52.8	52.8	52.8	52.9	52.9	52.9	52.9	53.0	53.0	53.1
GE 18000	50.5	52.3	52.6	52.8	53.0	53.0	53.0	53.0	53.1	53.1	53.1	53.1	53.1	53.1	53.2	53.3
GE 16000	50.6	52.5	52.8	52.9	53.1	53.1	53.1	53.1	53.1	53.2	53.3	53.3	53.3	53.3	53.3	53.4
GE 14000	51.4	53.4	53.7	53.9	54.0	54.0	54.1	54.1	54.1	54.2	54.2	54.2	54.2	54.2	54.3	54.4
GE 12000	53.0	55.2	55.5	55.7	55.9	55.9	55.9	55.9	55.9	56.0	56.0	56.0	56.0	56.1	56.1	56.2
GE 10000	57.0	59.7	60.0	60.2	60.4	60.4	60.4	60.5	60.5	60.5	60.6	60.6	60.6	60.6	60.7	60.8
GE 9000	57.6	60.5	60.8	61.0	61.2	61.2	61.2	61.2	61.2	61.3	61.4	61.4	61.4	61.4	61.5	61.5
GE 8000	59.9	62.8	63.1	63.3	63.5	63.5	63.5	63.5	63.5	63.6	63.7	63.7	63.7	63.7	63.8	63.9
GE 7000	61.5	64.6	64.9	65.2	65.4	65.4	65.4	65.4	65.4	65.5	65.5	65.5	65.5	65.5	65.6	65.7
GE 6000	63.0	66.2	66.5	66.9	67.1	67.1	67.1	67.1	67.1	67.2	67.3	67.3	67.3	67.3	67.4	67.5
GE 5000	65.8	69.4	69.7	70.0	70.3	70.3	70.3	70.3	70.3	70.4	70.5	70.5	70.5	70.5	70.6	70.7
GE 4500	66.8	70.4	70.8	71.1	71.4	71.4	71.4	71.4	71.4	71.5	71.6	71.6	71.6	71.6	71.7	71.8
GE 4000	70.3	74.4	74.8	75.3	75.6	75.6	75.7	75.7	75.7	75.8	75.9	75.9	75.9	75.9	76.0	76.1
GE 3500	71.1	75.3	75.9	76.3	76.6	76.6	76.7	76.7	76.7	76.8	76.9	76.9	76.9	76.9	77.0	77.1
GE 3000	73.9	78.5	79.1	79.7	80.0	80.0	80.1	80.1	80.1	80.3	80.3	80.3	80.3	80.3	80.4	80.5
GE 2500	76.5	81.9	82.6	83.2	83.6	83.6	83.7	83.8	83.8	83.9	83.9	83.9	84.0	84.0	84.1	84.1
GE 2000	78.2	84.5	85.4	86.1	86.6	86.6	86.7	86.8	86.8	86.9	87.0	87.0	87.0	87.0	87.1	87.2
GE 1800	78.6	85.0	85.9	86.7	87.2	87.3	87.4	87.5	87.5	87.6	87.7	87.7	87.7	87.7	87.8	87.9
GE 1500	79.6	86.5	87.6	88.5	89.0	89.1	89.3	89.4	89.4	89.5	89.6	89.6	89.6	89.6	89.7	89.8
GE 1200	80.6	88.2	89.4	90.4	91.0	91.1	91.3	91.4	91.4	91.6	91.7	91.7	91.7	91.7	91.8	91.9
GE 1000	81.0	89.0	90.3	91.5	92.4	92.5	92.8	92.9	92.9	93.1	93.2	93.2	93.2	93.3	93.3	93.4
GE 900	81.3	90.0	91.4	92.6	93.6	93.7	94.0	94.2	94.2	94.4	94.5	94.5	94.5	94.6	94.6	94.7
GE 800	81.5	90.5	92.0	93.3	94.3	94.4	94.8	95.0	95.1	95.3	95.4	95.4	95.4	95.5	95.5	95.6
GE 700	81.7	90.8	92.4	93.9	94.9	95.1	95.6	95.8	95.9	96.1	96.3	96.3	96.3	96.3	96.4	96.5
GE 600	81.8	91.3	92.9	94.5	95.8	95.9	96.5	96.8	96.9	97.1	97.2	97.3	97.3	97.3	97.4	97.5
GE 500	81.9	91.5	93.3	94.9	96.3	96.5	97.3	97.8	97.9	98.3	98.4	98.4	98.5	98.5	98.6	98.7
GE 400	81.9	91.6	93.4	95.0	96.5	96.7	97.6	98.2	98.3	98.7	98.9	98.9	99.0	99.1	99.1	99.2
GE 300	81.9	91.7	93.5	95.3	96.8	97.0	97.9	98.5	98.7	99.2	99.4	99.4	99.6	99.7	99.7	99.8
GE 200	81.9	91.7	93.5	95.3	96.8	97.0	97.9	98.6	98.8	99.3	99.5	99.5	99.7	99.7	99.8	99.9
GE 100	81.9	91.7	93.5	95.3	96.8	97.0	97.9	98.6	98.8	99.3	99.5	99.5	99.7	99.7	99.8	99.9
GE 0	81.9	91.7	93.5	95.3	96.8	97.0	97.9	98.6	98.8	99.3	99.5	99.5	99.7	99.8	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS: 7440

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(IST): 0000-0200

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2	GE 1 1/2	GE 1	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	43.1	45.7	45.9	46.2	46.7	46.7	46.8	46.8	46.8	46.8	46.8	46.8	46.8	46.8	46.8	46.8
GE 20000	45.3	48.0	48.3	48.8	49.2	49.2	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
GE 18000	45.3	48.0	48.3	48.8	49.2	49.2	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
GE 16000	45.3	48.0	48.3	48.8	49.2	49.2	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
GE 14000	45.6	48.2	48.6	49.0	49.4	49.4	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6	49.6
GE 12000	47.3	50.0	50.3	50.8	51.2	51.2	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3
GE 10000	52.6	55.3	55.7	56.1	56.6	56.6	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9
GE 9000	52.6	55.3	55.7	56.1	56.6	56.6	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9	56.9
GE 8000	55.2	58.3	58.8	59.2	60.1	60.1	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4
GE 7000	56.4	59.7	60.1	60.6	61.4	61.4	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9	61.9
GE 6000	58.3	61.7	62.1	62.6	63.4	63.4	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
GE 5000	61.2	64.9	65.3	65.8	66.7	66.7	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1	67.1
GE 4500	61.7	65.3	65.8	66.2	67.1	67.1	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6	67.6
GE 4000	63.1	67.2	67.8	68.4	69.6	69.6	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
GE 3500	64.1	68.2	68.8	69.4	70.6	70.6	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0	71.0
GE 3000	67.1	71.2	71.8	72.4	73.8	73.8	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
GE 2500	69.6	73.9	74.8	75.4	76.8	76.9	77.3	77.4	77.4	77.7	77.7	77.7	77.7	77.7	77.7	77.7
GE 2000	71.7	76.2	77.2	78.2	79.9	80.0	80.7	80.8	80.8	81.6	81.6	81.6	81.6	81.6	81.6	81.6
GE 1800	72.2	76.9	77.9	79.0	80.8	80.9	81.6	81.7	81.7	82.6	82.6	82.6	82.6	82.6	82.6	82.6
GE 1500	74.2	79.4	80.6	81.7	83.7	83.9	84.7	85.0	85.0	85.9	85.9	85.9	85.9	85.9	85.9	85.9
GE 1200	74.8	81.1	82.2	83.3	85.3	85.6	86.3	86.7	86.8	87.7	87.7	87.7	87.7	87.7	87.7	87.7
GE 1000	75.1	81.8	83.1	84.3	86.3	86.6	87.4	87.9	88.0	89.2	89.2	89.2	89.6	89.6	89.6	89.6
GE 900	75.4	82.3	83.7	84.9	87.0	87.4	88.3	88.8	89.0	90.4	90.6	90.6	90.9	90.9	90.9	90.9
GE 800	75.7	82.8	84.2	85.4	87.6	88.1	89.3	90.0	90.4	91.9	92.0	92.0	92.3	92.3	92.6	92.6
GE 700	75.7	83.0	84.4	85.7	87.9	88.6	89.8	90.4	90.9	92.3	92.4	92.4	92.8	92.8	93.0	93.0
GE 600	75.7	83.3	85.0	86.3	88.8	89.4	91.2	91.9	92.3	94.0	94.1	94.1	94.4	94.4	94.7	94.7
GE 500	75.9	83.9	85.6	87.7	90.1	90.8	92.7	93.4	93.9	95.7	95.8	95.8	96.1	96.1	96.3	96.3
GE 400	75.9	84.0	86.0	88.3	91.4	92.1	94.1	95.0	95.6	97.6	97.7	97.7	98.0	98.0	98.2	98.2
GE 300	75.9	84.1	86.1	88.4	91.6	92.3	94.4	95.3	96.0	98.3	98.4	98.4	98.8	98.8	99.0	99.0
GE 200	76.0	84.2	86.2	88.6	91.7	92.4	94.6	95.4	96.1	98.4	98.7	98.7	99.0	99.0	99.2	99.2
GE 100	76.0	84.2	86.2	88.6	91.7	92.4	94.6	95.4	96.1	98.4	98.7	98.7	99.0	99.3	99.8	100.0
GE 01	76.0	84.2	86.2	88.6	91.7	92.4	94.6	95.4	96.1	98.4	98.7	98.7	99.0	99.3	99.8	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(LST): 0300-0500

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	46.4	48.0	48.4	48.4	48.7	48.7	49.0	49.1	49.1	49.4	49.4	49.4	49.4	49.4	49.4	49.4
GE 20000	48.8	50.3	50.8	50.8	51.0	51.0	51.3	51.4	51.4	51.8	51.8	51.8	51.8	51.8	51.8	51.8
GE 18000	48.8	50.3	50.8	50.8	51.0	51.0	51.3	51.4	51.4	51.8	51.8	51.8	51.8	51.8	51.8	51.8
GE 16000	48.8	50.3	50.8	50.8	51.0	51.0	51.3	51.4	51.4	51.8	51.8	51.8	51.8	51.8	51.8	51.8
GE 14000	49.2	50.8	51.2	51.2	51.4	51.4	51.8	51.9	51.9	52.2	52.2	52.2	52.2	52.2	52.2	52.2
GE 12000	50.9	52.4	53.0	53.0	53.2	53.2	53.6	53.7	53.7	54.0	54.0	54.0	54.0	54.0	54.0	54.0
GE 10000	54.1	55.9	56.6	56.6	56.8	56.8	57.1	57.2	57.2	57.6	57.6	57.6	57.6	57.6	57.6	57.6
GE 9000	54.1	55.9	56.6	56.6	56.8	56.8	57.1	57.2	57.2	57.6	57.6	57.6	57.6	57.6	57.6	57.6
GE 8000	56.3	58.6	59.4	59.7	60.0	60.0	60.4	60.4	60.6	60.9	60.9	60.9	60.9	60.9	60.9	60.9
GE 7000	56.7	59.3	60.2	60.7	61.0	61.0	61.4	61.6	61.6	61.9	61.9	61.9	61.9	61.9	61.9	61.9
GE 6000	57.4	60.3	61.2	61.7	62.0	62.0	62.4	62.6	62.6	62.9	62.9	62.9	62.9	62.9	62.9	62.9
GE 5000	59.6	62.7	63.8	64.2	64.6	64.6	65.0	65.1	65.1	65.4	65.4	65.4	65.4	65.4	65.4	65.4
GE 4500	60.1	63.2	64.3	64.8	65.1	65.1	65.6	65.7	65.7	66.0	66.0	66.0	66.0	66.0	66.0	66.0
GE 4000	61.3	64.9	66.0	66.4	66.9	66.9	67.3	67.4	67.4	67.8	67.8	67.8	67.8	67.8	67.8	67.8
GE 3500	62.3	65.9	67.0	67.4	67.9	67.9	68.3	68.4	68.4	68.8	68.8	68.8	68.8	68.8	68.8	68.8
GE 3000	64.9	68.8	70.0	70.4	71.2	71.2	71.7	71.8	71.8	72.1	72.1	72.1	72.1	72.1	72.1	72.1
GE 2500	67.2	71.6	73.0	73.4	74.2	74.2	75.0	75.1	75.1	75.8	75.8	75.8	75.8	75.8	75.8	75.8
GE 2000	70.9	76.1	78.0	78.4	79.7	79.7	80.7	81.1	81.1	82.1	82.1	82.1	82.1	82.1	82.1	82.1
GE 1800	71.3	76.7	78.6	79.0	80.2	80.2	81.2	81.7	81.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
GE 1500	72.2	78.4	80.4	81.0	82.4	82.4	83.6	84.0	84.0	85.2	85.2	85.2	85.2	85.2	85.2	85.2
GE 1200	72.7	79.4	81.4	82.1	83.6	83.6	84.7	85.3	85.3	86.6	86.6	86.6	86.6	86.6	86.6	86.6
GE 1000	72.9	80.4	82.6	83.8	85.2	85.2	86.3	87.1	87.1	88.3	88.3	88.3	88.4	88.4	88.4	88.4
GE 900	73.0	81.0	83.3	84.6	86.0	86.1	87.3	88.2	88.2	89.7	89.8	89.8	89.9	89.9	90.0	90.0
GE 800	73.3	81.6	84.0	85.4	87.0	87.1	88.3	89.4	89.4	90.9	91.0	91.0	91.1	91.1	91.2	91.2
GE 700	73.6	81.8	84.3	85.8	87.3	87.6	88.9	90.2	90.2	91.7	91.8	91.8	91.9	91.9	92.0	92.0
GE 600	73.8	82.1	85.1	86.7	88.2	88.6	90.3	91.7	91.7	93.3	93.4	93.4	93.6	93.6	93.7	93.7
GE 500	73.8	82.4	85.6	87.2	89.0	89.3	91.2	92.8	93.1	94.8	94.9	94.9	95.1	95.1	95.2	95.2
GE 400	73.8	82.6	85.7	88.4	90.8	91.1	93.0	94.9	95.3	97.0	97.3	97.3	97.6	97.6	97.8	97.8
GE 300	73.8	82.7	85.8	88.7	91.0	91.3	93.2	95.2	95.7	98.0	98.4	98.4	98.7	98.7	98.9	98.9
GE 200	73.8	82.7	85.8	88.7	91.0	91.3	93.2	95.2	95.7	98.0	98.4	98.6	98.8	98.8	99.1	99.1
GE 100	73.8	82.7	85.8	88.7	91.0	91.3	93.2	95.2	95.7	98.1	98.6	98.7	99.1	99.3	99.8	99.8
GE 0	73.8	82.7	85.8	88.7	91.0	91.3	93.2	95.2	95.7	98.2	98.7	98.8	99.2	99.4	100.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(LST): 0600-0800

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	41.4	43.7	44.2	44.7	45.2	45.2	45.4	45.7	45.7	45.8	45.8	45.8	45.8	45.8	45.8	45.8
GE 20000	45.4	47.8	48.3	48.8	49.3	49.3	49.6	49.8	49.8	49.9	49.9	49.9	49.9	49.9	49.9	49.9
GE 18000	45.6	47.9	48.4	48.9	49.4	49.4	49.7	49.9	49.9	50.0	50.0	50.0	50.0	50.0	50.0	50.0
GE 16000	45.6	47.9	48.4	48.9	49.4	49.4	49.7	49.9	49.9	50.0	50.0	50.0	50.0	50.0	50.0	50.0
GE 14000	46.3	48.7	49.2	49.7	50.2	50.2	50.4	50.7	50.7	50.8	50.8	50.8	50.8	50.8	50.8	50.8
GE 12000	47.3	49.7	50.2	50.7	51.2	51.2	51.4	51.7	51.7	51.8	51.8	51.8	51.8	51.8	51.8	51.8
GE 10000	50.4	53.4	54.0	54.4	55.0	55.1	55.3	55.6	55.6	55.7	55.7	55.7	55.7	55.7	55.7	55.7
GE 9000	50.7	53.7	54.3	54.8	55.3	55.4	55.7	55.9	55.9	56.0	56.0	56.0	56.0	56.0	56.0	56.0
GE 8000	53.6	57.0	57.8	58.3	58.9	59.0	59.2	59.4	59.4	59.6	59.6	59.6	59.6	59.6	59.6	59.6
GE 7000	54.2	57.8	58.6	59.3	60.1	60.2	60.4	60.7	60.7	60.8	60.8	60.8	60.8	60.8	60.8	60.8
GE 6000	54.6	58.1	58.9	59.7	60.4	60.6	60.8	61.0	61.0	61.1	61.1	61.1	61.1	61.1	61.1	61.1
GE 5000	57.2	61.1	61.9	62.7	63.8	63.9	64.2	64.6	64.6	64.7	64.7	64.7	64.7	64.7	64.7	64.7
GE 4500	57.7	61.6	62.3	63.1	64.3	64.4	64.8	65.1	65.1	65.2	65.2	65.2	65.2	65.2	65.2	65.2
GE 4000	58.3	62.4	63.2	64.2	65.4	65.6	65.9	66.2	66.2	66.3	66.3	66.3	66.4	66.4	66.4	66.4
GE 3500	59.0	63.2	64.0	65.0	66.2	66.3	66.7	67.0	67.0	67.1	67.1	67.1	67.2	67.2	67.2	67.2
GE 3000	60.0	64.8	65.7	66.7	68.1	68.2	68.7	69.0	69.0	69.1	69.1	69.1	69.2	69.2	69.2	69.2
GE 2500	61.4	67.3	68.3	69.3	70.8	70.9	71.8	72.1	72.1	72.2	72.2	72.2	72.3	72.3	72.3	72.3
GE 2000	65.9	72.4	73.7	75.1	76.8	76.9	78.2	78.6	78.6	78.7	78.7	78.7	78.8	78.8	78.8	78.8
GE 1800	66.8	73.6	74.8	76.2	77.9	78.0	79.3	79.7	79.7	79.8	79.8	79.8	79.9	79.9	79.9	79.9
GE 1500	68.1	75.6	76.9	78.4	80.2	80.3	81.7	82.1	82.2	82.7	82.7	82.7	82.8	82.8	82.8	82.8
GE 1200	68.9	76.9	78.3	80.3	82.1	82.2	83.6	84.1	84.2	84.8	84.9	84.9	85.0	85.0	85.0	85.0
GE 1000	69.3	77.9	79.3	81.3	83.1	83.2	84.7	85.2	85.3	85.9	86.1	86.1	86.6	86.6	86.6	86.6
GE 900	69.9	78.9	80.3	82.6	84.7	85.0	86.4	87.0	87.1	88.0	88.2	88.2	88.7	88.7	88.7	88.7
GE 800	69.9	79.1	80.6	82.9	85.0	85.3	86.8	87.4	87.6	88.7	89.1	89.1	89.6	89.6	89.6	89.6
GE 700	70.1	79.4	80.9	83.3	85.7	86.8	87.4	88.3	88.4	89.7	90.1	90.1	90.7	90.7	90.7	90.7
GE 600	70.4	79.9	81.3	84.0	86.4	86.8	88.4	89.4	89.7	90.9	91.3	91.3	91.9	91.9	91.9	91.9
GE 500	70.4	80.0	81.7	84.8	87.4	87.9	89.6	90.7	91.0	92.6	93.0	93.2	93.9	93.9	93.9	93.9
GE 400	70.4	80.4	82.3	85.8	88.9	89.3	91.3	92.6	92.9	94.6	95.3	95.6	96.3	96.3	96.4	96.4
GE 300	70.4	80.4	82.4	86.0	89.2	89.7	92.1	93.6	93.9	96.1	97.0	97.3	98.1	98.1	98.2	98.3
GE 200	70.4	80.4	82.4	86.0	89.2	89.7	92.1	93.7	94.0	96.6	97.4	97.8	98.6	98.7	98.9	99.2
GE 100	70.4	80.4	82.4	86.0	89.2	89.7	92.1	93.7	94.0	96.8	97.9	98.2	99.0	99.1	99.4	99.9
GE 01	70.4	80.4	82.4	86.0	89.2	89.7	92.1	93.7	94.0	96.8	97.9	98.2	99.0	99.1	99.4	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(LST): 0900-1100

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	37.4	40.9	41.2	41.6	42.0	42.0	42.2	42.2	42.2	42.4	42.4	42.4	42.6	42.6	42.6	42.6
GE 20000	42.8	46.4	46.9	47.2	47.7	47.7	48.0	48.0	48.0	48.2	48.2	48.2	48.3	48.3	48.3	48.3
GE 18000	43.3	47.0	47.4	47.8	48.2	48.2	48.6	48.6	48.6	48.8	48.8	48.8	48.9	48.9	48.9	48.9
GE 16000	43.6	47.2	47.7	48.0	48.4	48.4	48.8	48.8	48.8	49.0	49.0	49.0	49.1	49.1	49.1	49.1
GE 14000	45.0	48.8	49.2	49.6	50.1	50.1	50.4	50.4	50.4	50.7	50.7	50.7	50.8	50.8	50.8	50.8
GE 12000	46.8	50.6	51.0	51.3	51.9	51.9	52.2	52.2	52.2	52.4	52.4	52.4	52.6	52.6	52.6	52.6
GE 10000	49.8	54.0	54.4	54.8	55.3	55.3	55.7	55.8	55.8	56.0	56.0	56.0	56.1	56.1	56.1	56.1
GE 9000	50.3	54.6	55.0	55.3	55.9	55.9	56.2	56.3	56.3	56.6	56.6	56.6	56.7	56.7	56.7	56.7
GE 8000	53.2	57.6	58.2	58.8	59.7	59.7	60.0	60.1	60.1	60.3	60.3	60.3	60.4	60.4	60.4	60.4
GE 7000	53.7	58.2	58.9	59.4	60.3	60.3	60.7	60.8	60.8	61.0	61.0	61.0	61.1	61.1	61.1	61.1
GE 6000	54.1	58.7	59.3	59.9	60.8	60.8	61.2	61.3	61.3	61.6	61.6	61.6	61.7	61.7	61.7	61.7
GE 5000	56.0	60.6	61.2	62.0	62.9	62.9	63.3	63.6	63.6	63.9	63.9	63.9	64.0	64.0	64.0	64.0
GE 4500	56.3	61.2	61.9	62.7	63.6	63.6	64.1	64.3	64.3	64.7	64.7	64.7	64.8	64.8	64.8	64.8
GE 4000	57.3	62.6	63.2	64.0	64.9	64.9	65.4	65.7	65.7	66.1	66.1	66.1	66.2	66.2	66.2	66.2
GE 3500	57.9	63.4	64.2	65.0	65.9	65.9	66.4	66.7	66.7	67.1	67.1	67.1	67.2	67.2	67.2	67.2
GE 3000	59.4	65.4	66.2	67.0	68.1	68.2	68.9	69.1	69.1	69.6	69.6	69.6	69.7	69.7	69.7	69.7
GE 2500	60.2	66.8	67.6	68.6	69.7	69.8	70.6	70.8	70.8	71.2	71.2	71.2	71.3	71.3	71.3	71.3
GE 2000	63.0	70.0	71.0	72.1	73.3	73.8	74.9	75.7	75.7	76.1	76.3	76.4	76.6	76.6	76.6	76.6
GE 1800	63.9	71.0	72.0	73.2	74.6	75.0	76.1	77.0	77.0	77.4	77.7	77.8	77.9	77.9	77.9	77.9
GE 1500	65.8	73.4	74.4	75.8	77.3	77.8	78.9	79.8	79.8	80.3	80.8	80.9	81.0	81.0	81.0	81.0
GE 1200	66.7	75.1	76.7	78.3	80.2	80.8	81.9	82.9	83.0	84.3	85.0	85.2	85.3	85.3	85.3	85.3
GE 1000	66.9	75.4	77.2	79.4	81.4	82.0	83.1	84.1	84.3	85.8	86.7	87.0	87.3	87.3	87.3	87.3
GE 900	67.6	76.6	78.4	80.7	82.9	83.6	85.0	86.0	86.2	87.7	88.6	89.0	89.3	89.3	89.3	89.3
GE 800	67.7	76.8	78.7	81.0	83.2	83.9	85.6	86.6	86.8	88.2	89.1	89.6	89.9	89.9	89.9	89.9
GE 700	68.0	77.4	79.4	81.9	84.1	84.8	86.7	87.8	88.1	89.7	90.6	91.0	91.7	91.7	91.8	91.8
GE 600	68.0	77.6	79.6	82.2	84.6	85.2	87.2	88.6	89.0	90.7	91.7	92.1	92.9	92.9	93.0	93.0
GE 500	68.0	77.7	79.8	82.6	85.0	85.8	87.9	89.2	89.7	91.3	92.6	93.0	93.8	94.1	94.2	94.2
GE 400	68.1	77.8	80.0	82.9	85.7	86.4	89.4	91.1	91.6	93.4	94.9	95.4	96.3	96.7	96.8	96.8
GE 300	68.1	77.8	80.0	83.0	85.8	86.6	89.7	91.6	92.1	94.6	96.2	96.8	98.0	98.3	98.4	98.8
GE 200	68.1	77.8	80.0	83.0	85.8	86.6	89.8	91.7	92.2	94.7	96.4	97.0	98.9	99.2	99.3	99.7
GE 100	68.1	77.8	80.0	83.0	85.8	86.6	89.8	91.7	92.2	94.7	96.4	97.0	98.9	99.2	99.3	99.7
GE 0	68.1	77.8	80.0	83.0	85.8	86.6	89.8	91.7	92.2	94.7	96.4	97.0	98.9	99.2	99.3	100.0
TOTAL NUMBER OF OBSERVATIONS: 900																

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(LST): 1200-1400

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	37.1	41.4	42.1	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.7	42.7	42.8	42.8
GE 20000	43.6	48.2	49.0	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.6	49.6	49.8	49.8
GE 18000	44.4	49.1	49.9	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.3	50.4	50.4	50.7	50.7
GE 16000	44.6	49.2	50.0	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.6	50.6	50.8	50.8
GE 14000	46.6	51.2	52.0	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.6	52.6	52.8	52.8
GE 12000	48.0	52.7	53.4	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	54.0	54.0	54.2	54.2
GE 10000	50.9	55.8	56.6	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.1	57.1	57.3	57.3
GE 9000	51.3	56.2	57.0	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.4	57.6	57.6	57.8	57.8
GE 8000	54.3	59.9	60.8	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.3	61.4	61.4	61.7	61.7
GE 7000	55.3	61.1	62.0	62.6	62.6	62.7	62.7	62.7	62.8	62.8	62.8	62.8	62.9	62.9	63.1	63.1
GE 6000	55.4	61.6	62.4	63.0	63.1	63.2	63.2	63.2	63.3	63.3	63.3	63.3	63.4	63.4	63.7	63.7
GE 5000	57.0	63.1	64.0	64.6	64.7	64.8	64.8	64.8	64.9	64.9	64.9	64.9	65.0	65.0	65.2	65.2
GE 4500	57.0	63.2	64.1	64.7	64.8	64.9	64.9	64.9	65.0	65.0	65.0	65.0	65.1	65.1	65.3	65.3
GE 4000	57.8	64.7	65.6	66.1	66.2	66.3	66.7	66.8	66.9	67.1	67.1	67.1	67.2	67.2	67.4	67.4
GE 3500	58.9	65.9	66.8	67.3	67.4	67.6	67.9	68.0	68.1	68.3	68.3	68.3	68.4	68.4	68.7	68.7
GE 3000	61.7	69.0	70.0	70.7	70.8	70.9	71.2	71.4	71.6	71.8	71.8	71.8	71.9	71.9	72.1	72.1
GE 2500	63.6	71.8	73.0	73.8	73.9	74.0	74.3	74.6	74.7	74.9	74.9	74.9	75.0	75.0	75.2	75.2
GE 2000	66.0	74.8	76.3	77.1	77.2	77.4	78.6	78.8	78.9	79.2	79.2	79.2	79.3	79.3	79.6	79.6
GE 1800	66.3	75.2	76.9	77.7	77.8	78.0	79.1	79.3	79.4	79.8	79.8	79.8	79.9	79.9	80.1	80.1
GE 1500	67.4	77.0	78.9	79.7	80.2	80.4	81.6	81.8	81.9	82.2	82.3	82.3	82.4	82.4	82.7	82.7
GE 1200	67.0	80.7	83.0	84.2	84.9	85.2	86.7	87.1	87.2	87.8	88.1	88.1	88.4	88.4	88.7	88.7
GE 1000	69.3	82.1	84.7	86.0	86.7	87.0	88.6	89.0	89.1	89.8	90.3	90.3	90.7	90.7	90.9	90.9
GE 900	69.6	82.6	85.2	86.6	87.4	87.9	89.6	90.0	90.2	90.9	91.4	91.4	91.8	91.8	92.0	92.0
GE 800	69.7	83.0	85.8	87.1	88.1	88.7	90.3	90.9	91.1	91.8	92.6	92.6	92.9	92.9	93.1	93.1
GE 700	69.9	83.2	86.0	87.6	88.7	89.4	91.4	92.0	92.2	92.9	93.8	93.8	94.3	94.3	94.6	94.6
GE 600	69.9	83.2	86.0	87.6	89.0	89.8	91.8	92.4	92.7	93.3	94.2	94.2	95.0	95.0	95.2	95.3
GE 500	69.9	83.2	86.1	87.8	89.2	90.1	92.4	93.1	93.3	94.1	95.0	95.0	95.8	96.1	96.3	96.4
GE 400	69.9	83.4	86.6	88.2	89.8	90.7	93.0	93.9	94.1	95.1	96.0	96.0	96.9	97.2	97.7	97.8
GE 300	69.9	83.4	86.7	88.3	89.9	90.9	93.4	94.4	94.7	96.0	97.0	97.0	97.9	98.2	98.9	99.1
GE 200	69.9	83.4	86.7	88.3	89.9	90.9	93.4	94.6	94.8	96.1	97.2	97.2	98.3	98.7	99.3	99.6
GE 100	69.9	83.4	86.7	88.3	89.9	90.9	93.4	94.6	94.8	96.1	97.2	97.2	98.3	98.7	99.3	99.7
GE 0	69.9	83.4	86.7	88.3	89.9	90.9	93.4	94.6	94.8	96.1	97.2	97.2	98.3	98.7	99.3	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(LST): 1500-1700

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	35.8	40.0	40.3	40.7	40.8	40.9	41.0	41.1	41.1	41.2	41.2	41.2	41.2	41.2	41.2	41.2
GE 20000	42.8	47.2	47.6	47.9	48.0	48.1	48.2	48.3	48.3	48.4	48.4	48.4	48.4	48.4	48.4	48.4
GE 18000	43.2	47.7	48.0	48.3	48.4	48.6	48.7	48.8	48.8	48.9	48.9	48.9	48.9	48.9	48.9	48.9
GE 16000	43.4	47.9	48.2	48.6	48.7	48.8	48.9	49.0	49.0	49.1	49.1	49.1	49.1	49.1	49.1	49.1
GE 14000	45.0	49.6	49.9	50.2	50.3	50.4	50.6	50.7	50.7	50.8	50.8	50.8	50.8	50.8	50.8	50.8
GE 12000	47.4	52.2	52.6	52.9	53.0	53.1	53.2	53.3	53.3	53.4	53.4	53.4	53.4	53.4	53.4	53.4
GE 10000	50.8	55.8	56.1	56.4	56.6	56.7	56.8	56.9	56.9	57.0	57.0	57.0	57.0	57.0	57.0	57.0
GE 9000	51.4	56.4	56.8	57.1	57.2	57.3	57.4	57.6	57.6	57.7	57.7	57.7	57.7	57.7	57.7	57.7
GE 8000	55.3	60.3	60.7	61.1	61.2	61.3	61.4	61.6	61.6	61.7	61.7	61.7	61.7	61.7	61.7	61.7
GE 7000	56.4	61.4	61.8	62.3	62.6	62.7	63.1	63.2	63.2	63.3	63.3	63.3	63.3	63.3	63.3	63.3
GE 6000	57.0	62.2	62.6	63.2	63.6	63.7	64.2	64.3	64.3	64.4	64.4	64.4	64.4	64.4	64.4	64.4
GE 5000	57.8	63.1	63.4	64.1	64.6	64.7	65.2	65.3	65.3	65.4	65.4	65.4	65.4	65.4	65.4	65.4
GE 4500	58.2	63.6	63.9	64.6	65.0	65.1	65.7	65.8	65.8	65.9	65.9	65.9	65.9	65.9	65.9	65.9
GE 4000	59.6	65.2	65.8	66.4	66.9	67.0	67.7	67.8	67.8	68.1	68.1	68.1	68.2	68.2	68.2	68.2
GE 3500	60.3	66.2	66.8	67.4	67.9	68.0	68.7	68.8	68.8	69.1	69.1	69.1	69.2	69.2	69.2	69.2
GE 3000	62.7	69.0	69.7	70.3	71.0	71.1	71.8	71.9	71.9	72.2	72.2	72.2	72.3	72.3	72.3	72.3
GE 2500	64.6	71.9	72.8	73.6	74.2	74.7	75.3	75.4	75.4	75.8	75.8	75.9	76.0	76.0	76.0	76.0
GE 2000	66.8	74.8	74.1	77.1	78.0	78.4	79.6	80.0	80.0	80.3	80.3	80.3	80.4	80.6	80.6	80.6
GE 1800	67.0	75.7	77.1	78.1	79.0	79.7	80.8	81.2	81.2	81.6	81.6	81.6	81.7	81.8	81.8	81.8
GE 1500	68.6	78.0	80.0	81.2	82.1	82.8	84.3	84.4	84.4	84.8	84.9	84.9	85.0	85.1	85.1	85.1
GE 1200	70.4	81.6	83.7	85.1	86.0	86.7	88.0	88.4	88.4	89.1	89.3	89.3	89.4	89.6	89.6	89.6
GE 1000	71.1	82.7	84.8	86.2	87.2	87.9	89.4	90.0	90.0	90.7	90.9	90.9	91.0	91.1	91.1	91.1
GE 900	71.2	83.0	85.2	86.8	88.1	88.8	90.4	91.1	91.1	91.8	92.0	92.0	92.2	92.3	92.3	92.3
GE 800	71.3	83.1	85.3	87.1	88.4	89.1	90.8	91.8	91.9	93.0	93.2	93.2	93.8	93.9	93.9	93.9
GE 700	71.3	83.1	85.3	87.1	88.4	89.3	91.1	92.3	92.4	93.9	94.2	94.2	95.0	95.1	95.1	95.2
GE 600	71.6	83.4	85.7	87.6	88.9	89.8	91.6	92.8	92.9	94.4	94.8	94.8	95.7	95.8	95.8	95.9
GE 500	71.6	83.4	85.7	87.6	88.9	89.8	91.9	93.1	93.2	94.8	95.1	95.1	96.0	96.1	96.1	96.4
GE 400	71.6	83.4	85.8	87.9	89.4	90.4	92.7	94.0	94.1	95.9	96.2	96.4	97.3	97.4	97.4	97.9
GE 300	71.6	83.4	85.8	87.9	89.6	90.6	93.0	94.3	94.4	96.3	97.0	97.2	98.1	98.3	98.6	99.0
GE 200	71.6	83.4	85.8	87.9	89.6	90.6	93.0	94.3	94.4	96.6	97.2	97.4	98.3	98.6	98.8	99.2
GE 100	71.6	83.4	85.8	87.9	89.6	90.6	93.0	94.3	94.4	96.6	97.2	97.4	98.3	98.6	98.9	99.6
GE 0	71.6	83.4	85.8	87.9	89.6	90.6	93.0	94.3	94.4	96.6	97.2	97.4	98.3	98.6	98.9	100.0

TOTAL NUMBER OF OBSERVATIONS: 900



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(IST): 1800-2000

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	1 10	GE 4	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	38.4	40.4	40.7	40.8	41.0	41.0	41.0	41.0	41.0	41.0	41.1	41.1	41.1	41.1	41.1	41.1
GE 20000	42.7	45.6	45.9	46.0	46.2	46.2	46.2	46.2	46.2	46.2	46.3	46.3	46.3	46.3	46.3	46.3
GE 18000	42.8	45.7	46.0	46.1	46.3	46.3	46.3	46.3	46.3	46.3	46.4	46.4	46.4	46.4	46.4	46.4
GE 16000	42.9	45.8	46.1	46.2	46.4	46.4	46.4	46.4	46.4	46.4	46.5	46.5	46.5	46.5	46.5	46.5
GE 14000	44.6	47.6	47.9	48.0	48.2	48.2	48.2	48.2	48.2	48.2	48.3	48.3	48.3	48.3	48.3	48.3
GE 12000	46.9	50.3	50.7	50.8	51.0	51.0	51.0	51.0	51.0	51.0	51.1	51.1	51.1	51.1	51.1	51.1
GE 10000	51.4	55.0	55.3	55.4	55.7	55.7	55.7	55.7	55.7	55.7	55.8	55.8	55.8	55.8	55.8	55.8
GE 9000	51.8	55.3	55.7	55.8	56.0	56.0	56.0	56.0	56.0	56.0	56.1	56.1	56.1	56.1	56.1	56.1
GE 8000	55.1	59.1	59.4	59.6	59.8	59.8	59.8	59.8	59.8	59.8	59.9	59.9	59.9	59.9	59.9	59.9
GE 7000	56.7	60.7	61.0	61.3	61.6	61.6	61.6	61.6	61.6	61.6	61.7	61.7	61.7	61.7	61.7	61.7
GE 6000	57.8	61.8	62.1	62.6	62.8	62.8	62.8	62.8	62.8	62.8	62.9	62.9	62.9	62.9	62.9	62.9
GE 5000	59.1	63.1	63.4	64.1	64.4	64.4	64.4	64.4	64.4	64.4	64.6	64.6	64.6	64.6	64.6	64.6
GE 4500	59.9	64.0	64.3	65.0	65.3	65.3	65.3	65.3	65.3	65.3	65.4	65.4	65.4	65.4	65.4	65.4
GE 4000	62.3	66.7	67.0	67.8	68.3	68.3	68.6	68.6	68.6	68.6	68.7	68.7	68.7	68.7	68.7	68.7
GE 3500	63.9	68.4	68.8	69.6	70.1	70.1	70.3	70.3	70.3	70.3	70.4	70.4	70.4	70.4	70.4	70.4
GE 3000	65.9	70.9	71.3	72.2	72.8	72.8	73.2	73.2	73.3	73.3	73.4	73.4	73.4	73.4	73.4	73.4
GE 2500	68.4	74.3	74.9	75.8	76.3	76.3	76.8	76.8	76.9	77.0	77.1	77.1	77.1	77.1	77.1	77.1
GE 2000	70.8	77.0	77.9	78.9	79.4	79.7	80.1	80.2	80.3	80.4	80.6	80.6	80.6	80.6	80.6	80.6
GE 1800	71.3	77.6	78.4	79.4	80.0	80.2	80.7	80.8	80.9	81.0	81.1	81.1	81.1	81.1	81.1	81.1
GE 1500	73.2	80.4	81.6	82.6	83.1	83.4	84.0	84.1	84.3	84.4	84.9	84.9	84.9	84.9	84.9	84.9
GE 1200	74.6	82.1	83.4	84.4	85.0	85.6	86.1	86.2	86.4	86.9	87.3	87.3	87.3	87.3	87.3	87.3
GE 1000	76.2	84.3	85.7	86.7	87.2	87.9	88.7	89.0	89.2	89.7	90.1	90.1	90.1	90.1	90.1	90.1
GE 900	76.3	84.7	86.0	87.2	88.0	88.7	89.4	90.0	90.2	90.8	91.2	91.2	91.4	91.4	91.4	91.4
GE 800	76.8	85.1	86.4	87.7	88.4	89.1	90.1	90.7	91.3	92.2	92.7	92.7	92.9	92.9	92.9	92.9
GE 700	77.0	85.4	86.8	88.0	88.9	89.7	90.9	91.8	92.4	93.4	93.9	93.9	94.1	94.1	94.1	94.1
GE 600	77.0	85.4	86.9	88.4	89.8	90.6	91.9	92.8	93.4	94.4	95.2	95.2	95.4	95.4	95.4	95.4
GE 500	77.3	85.8	87.2	88.9	90.2	91.1	92.4	93.3	94.0	95.1	95.9	95.9	96.1	96.1	96.1	96.4
GE 400	77.3	85.8	87.2	88.9	90.2	91.1	92.7	93.6	94.6	95.8	96.6	96.6	96.8	96.8	96.8	97.1
GE 300	77.3	85.8	87.2	88.9	90.2	91.1	93.1	94.0	95.3	96.6	97.4	97.4	97.8	97.8	97.9	98.2
GE 200	77.3	85.8	87.2	88.9	90.2	91.1	93.1	94.0	95.6	97.0	98.0	98.0	98.3	98.3	98.6	98.9
GE 100	77.3	85.8	87.2	88.9	90.2	91.1	93.1	94.0	95.7	97.1	98.2	98.2	98.7	98.7	98.9	99.6
GE	77.3	85.8	87.2	88.9	90.2	91.1	93.1	94.0	95.7	97.1	98.2	98.2	98.7	98.7	98.9	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(IST): 2100-2300

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	40.3	42.1	42.6	42.9	43.3	43.3	43.4	43.4	43.4	43.4	43.4	43.4	43.4	43.4	43.4	43.4
GE 20000	43.6	45.8	46.6	46.9	47.3	47.3	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4
GE 18000	43.6	45.8	46.6	46.9	47.3	47.3	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4
GE 16000	43.6	45.8	46.6	46.9	47.3	47.3	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4	47.4
GE 14000	44.7	46.9	47.7	48.0	48.4	48.4	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6
GE 12000	46.4	49.3	50.1	50.4	50.9	50.9	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
GE 10000	51.0	54.1	54.9	55.2	55.7	55.7	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8	55.8
GE 9000	51.6	54.7	55.4	55.8	56.2	56.2	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3	56.3
GE 8000	54.8	58.1	58.9	59.4	59.9	59.9	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
GE 7000	55.9	59.3	60.1	60.7	61.1	61.1	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2	61.2
GE 6000	57.9	61.7	62.4	63.1	63.7	63.7	63.8	63.8	63.8	63.8	63.8	63.8	63.8	63.8	63.8	63.8
GE 5000	59.8	63.7	64.4	65.1	65.7	65.7	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
GE 4500	60.3	64.2	65.0	65.7	66.2	66.2	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3
GE 4000	62.1	66.2	67.0	67.8	68.7	68.7	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
GE 3500	62.8	66.9	67.7	68.4	69.3	69.3	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7	69.7
GE 3000	66.4	70.7	71.4	72.2	73.1	73.1	73.4	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6
GE 2500	69.1	73.8	74.6	75.3	76.2	76.2	76.6	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
GE 2000	71.4	76.3	77.1	78.3	79.8	80.0	80.4	80.7	80.7	80.8	80.8	80.8	80.8	80.8	80.8	80.8
GE 1800	72.0	77.0	77.9	79.1	80.6	80.8	81.2	81.4	81.4	81.6	81.6	81.6	81.6	81.6	81.6	81.6
GE 1600	73.8	79.9	80.8	82.1	83.8	84.0	84.6	84.9	84.9	85.0	85.2	85.2	85.2	85.2	85.2	85.2
GE 1400	74.7	81.1	82.0	83.3	85.0	85.2	85.8	86.1	86.1	86.4	86.7	86.7	86.7	86.7	86.7	86.7
GE 1200	75.3	82.6	83.6	85.0	86.7	87.0	87.6	87.9	87.9	88.4	88.7	88.7	88.7	88.7	88.7	88.7
GE 1000	76.0	83.4	84.6	86.0	87.8	88.1	88.7	89.2	89.2	89.8	90.0	90.0	90.0	90.0	90.0	90.0
GE 900	76.4	84.2	85.4	87.1	88.9	89.2	89.8	90.3	90.8	91.3	91.7	91.7	91.7	91.7	91.7	91.7
GE 800	76.6	84.4	85.9	87.8	89.7	90.0	90.6	91.1	91.6	92.2	92.6	92.6	92.6	92.6	92.6	92.6
GE 700	76.7	84.9	86.7	88.8	91.1	91.4	92.0	92.6	93.0	93.7	94.0	94.0	94.0	94.0	94.0	94.0
GE 600	76.9	85.2	87.1	89.4	92.0	92.3	92.9	93.4	94.0	94.7	95.0	95.0	95.0	95.0	95.0	95.0
GE 500	76.9	85.2	87.1	89.4	92.2	92.6	93.6	94.1	94.8	95.8	96.1	96.1	96.1	96.1	96.1	96.1
GE 400	77.1	85.4	87.3	89.7	92.4	92.8	94.0	94.8	95.8	97.0	97.3	97.3	97.3	97.3	97.3	97.3
GE 300	77.1	85.4	87.3	89.7	92.4	92.8	94.0	94.8	96.1	97.6	98.2	98.2	98.3	98.3	98.3	98.3
GE 200	77.1	85.4	87.3	89.7	92.4	92.8	94.0	94.8	96.1	97.6	98.2	98.2	98.3	98.6	98.9	99.7
GE 100	77.1	85.4	87.3	89.7	92.4	92.8	94.0	94.8	96.1	97.6	98.2	98.2	98.3	98.6	98.9	99.7
GE 0	77.2	85.6	87.4	89.8	92.6	92.9	94.1	94.9	96.2	97.7	98.3	98.3	98.4	98.7	99.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 900

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(151): ALL

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	40.0	42.8	43.2	43.5	43.8	43.8	43.9	44.0	44.0	44.1	44.1	44.1	44.1	44.1	44.1	44.1
GE 20000	44.4	47.4	47.9	48.2	48.5	48.5	48.7	48.8	48.8	48.8	48.9	48.9	48.9	48.9	48.9	48.9
GE 18000	44.6	47.7	48.2	48.5	48.8	48.8	49.0	49.0	49.0	49.1	49.1	49.1	49.1	49.2	49.2	49.2
GE 16000	44.7	47.8	48.3	48.6	48.9	48.9	49.0	49.1	49.1	49.2	49.2	49.2	49.2	49.2	49.3	49.3
GE 14000	45.9	49.0	49.5	49.8	50.1	50.1	50.3	50.3	50.3	50.4	50.4	50.4	50.4	50.4	50.5	50.5
GE 12000	47.6	50.9	51.4	51.7	52.0	52.1	52.2	52.3	52.3	52.4	52.4	52.4	52.4	52.4	52.4	52.4
GE 10000	51.4	54.9	55.4	55.8	56.1	56.1	56.3	56.3	56.3	56.4	56.5	56.5	56.5	56.5	56.5	56.5
GE 9000	51.7	55.3	55.8	56.1	56.4	56.5	56.6	56.7	56.7	56.8	56.8	56.8	56.8	56.8	56.9	56.9
GE 8000	54.7	58.6	59.3	59.7	60.1	60.1	60.3	60.4	60.4	60.5	60.5	60.5	60.5	60.5	60.6	60.6
GE 7000	55.7	59.7	60.3	60.9	61.3	61.4	61.6	61.7	61.7	61.8	61.8	61.8	61.8	61.8	61.9	61.9
GE 6000	56.6	60.8	61.4	62.0	62.5	62.5	62.8	62.9	62.9	63.0	63.0	63.0	63.0	63.0	63.0	63.0
GE 5000	58.5	62.8	63.4	64.1	64.7	64.7	65.0	65.1	65.1	65.2	65.2	65.2	65.3	65.3	65.3	65.3
GE 4500	58.9	63.3	64.0	64.6	65.2	65.2	65.5	65.6	65.6	65.8	65.8	65.8	65.8	65.8	65.8	65.8
GE 4000	60.2	65.0	65.7	66.4	67.1	67.2	67.6	67.7	67.7	67.9	67.9	67.9	67.9	67.9	68.0	68.0
GE 3500	61.2	66.0	66.8	67.5	68.2	68.2	68.6	68.7	68.8	68.9	68.9	68.9	69.0	69.0	69.0	69.0
GE 3000	63.5	68.7	69.5	70.3	71.1	71.2	71.6	71.8	71.8	72.0	72.0	72.0	72.1	72.1	72.1	72.1
GE 2500	65.5	71.4	72.4	73.2	74.0	74.1	74.7	74.9	74.9	75.2	75.2	75.2	75.2	75.3	75.3	75.3
GE 2000	68.3	74.7	75.9	76.9	78.0	78.2	79.1	79.5	79.5	79.9	79.9	80.0	80.0	80.0	80.1	80.1
GE 1800	68.9	75.4	76.7	77.7	78.8	79.1	80.0	80.3	80.4	80.8	80.8	80.8	80.8	80.9	80.9	80.9
GE 1500	70.4	77.8	79.2	80.3	81.6	81.9	82.9	83.3	83.3	83.8	84.0	84.0	84.1	84.1	84.1	84.1
GE 1200	71.5	79.8	81.3	82.7	84.0	84.3	85.4	85.9	85.9	86.7	86.9	87.0	87.1	87.1	87.1	87.1
GE 1000	72.0	80.9	82.6	84.1	85.5	85.8	87.0	87.5	87.6	88.5	88.8	88.8	89.0	89.1	89.1	89.1
GE 900	72.4	81.6	83.3	84.9	86.5	86.9	88.2	88.8	88.9	89.9	90.2	90.3	90.5	90.5	90.6	90.6
GE 800	72.6	82.0	83.8	85.5	87.1	87.6	88.9	89.6	89.9	91.0	91.4	91.5	91.8	91.8	91.8	91.8
GE 700	72.8	82.2	84.1	85.9	87.6	88.2	89.6	90.5	90.8	92.0	92.4	92.5	92.9	92.9	93.0	93.0
GE 600	72.9	82.5	84.5	86.4	88.3	88.9	90.6	91.5	91.8	93.1	93.6	93.7	94.1	94.1	94.2	94.2
GE 500	73.0	82.7	84.8	87.0	89.0	89.6	91.4	92.4	92.8	94.1	94.7	94.7	95.2	95.3	95.4	95.5
GE 400	73.0	82.8	85.1	87.5	89.8	90.5	92.5	93.6	94.1	95.6	96.3	96.4	96.9	97.0	97.2	97.3
GE 300	73.0	82.9	85.2	87.6	90.0	90.7	92.9	94.2	94.7	96.6	97.4	97.5	98.1	98.2	98.4	98.6
GE 200	73.0	82.9	85.2	87.6	90.0	90.7	92.9	94.2	94.9	96.9	97.7	97.9	98.6	98.7	98.9	99.2
GE 100	73.0	82.9	85.2	87.6	90.0	90.7	92.9	94.2	94.9	96.9	97.8	98.0	98.7	98.9	99.3	99.7
GE 0	73.0	82.9	85.2	87.6	90.0	90.7	92.9	94.2	94.9	96.9	97.8	98.0	98.7	99.0	99.3	100.0

TOTAL NUMBER OF OBSERVATIONS: 7200

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(IST): 0000-0200

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	46.7	48.4	48.8	48.8	49.1	49.4	49.4	49.4	49.5	49.5	49.6	49.6	49.6	49.6	49.7	49.8
GE 20000	48.7	50.5	51.0	51.0	51.3	51.5	51.5	51.5	51.6	51.6	51.7	51.7	51.7	51.7	51.8	51.9
GE 18000	48.7	50.5	51.0	51.0	51.3	51.5	51.5	51.5	51.6	51.6	51.7	51.7	51.7	51.7	51.8	51.9
GE 16000	48.7	50.5	51.0	51.0	51.3	51.5	51.5	51.5	51.6	51.6	51.7	51.7	51.7	51.7	51.8	51.9
GE 14000	49.0	50.9	51.3	51.3	51.6	51.8	51.8	51.8	51.9	51.9	52.0	52.0	52.0	52.0	52.2	52.3
GE 12000	49.9	51.7	52.2	52.2	52.5	52.7	52.7	52.7	52.8	52.8	52.9	52.9	52.9	52.9	53.0	53.1
GE 10000	54.1	56.1	56.6	56.6	56.9	57.1	57.1	57.1	57.2	57.3	57.4	57.4	57.4	57.4	57.5	57.6
GE 9000	54.4	56.8	57.2	57.2	57.5	57.7	57.7	57.7	57.8	58.0	58.1	58.1	58.1	58.1	58.2	58.3
GE 8000	57.8	60.5	61.0	61.0	61.3	61.5	61.5	61.5	61.6	61.8	61.9	61.9	61.9	61.9	62.0	62.2
GE 7000	58.5	61.6	62.0	62.0	62.4	62.6	62.6	62.7	62.8	63.0	63.1	63.1	63.1	63.1	63.2	63.3
GE 6000	59.8	63.1	64.0	64.1	64.5	64.7	64.7	64.8	64.9	65.2	65.3	65.3	65.3	65.3	65.4	65.5
GE 5000	62.5	66.1	67.1	67.3	68.0	68.2	68.2	68.3	68.5	68.7	68.8	68.8	68.8	68.8	68.9	69.0
GE 4500	63.1	67.1	68.1	68.3	68.9	69.1	69.1	69.2	69.5	69.7	69.8	69.8	69.8	69.8	69.9	70.0
GE 4000	64.7	69.1	70.4	70.9	71.6	71.8	71.8	71.9	72.2	72.4	72.5	72.5	72.5	72.5	72.6	72.7
GE 3500	65.7	70.3	71.7	72.2	72.9	73.1	73.1	73.2	73.4	73.7	73.8	73.8	73.8	73.8	73.9	74.0
GE 3000	68.1	73.5	75.1	75.7	76.5	76.7	76.7	76.8	77.0	77.2	77.3	77.3	77.3	77.3	77.4	77.5
GE 2500	68.8	75.1	76.9	78.2	79.2	79.5	79.5	79.6	79.8	80.0	80.1	80.1	80.1	80.1	80.2	80.3
GE 2000	70.2	77.0	78.9	80.4	81.8	82.0	82.0	82.3	82.5	82.8	82.9	82.9	82.9	82.9	83.0	83.1
GE 1800	70.4	77.2	79.2	80.8	82.2	82.4	82.4	82.6	82.8	83.1	83.2	83.2	83.2	83.2	83.3	83.4
GE 1500	71.3	78.3	80.3	81.9	83.5	83.9	83.9	84.2	84.5	84.8	84.9	84.9	84.9	84.9	85.1	85.2
GE 1200	73.0	81.0	83.2	85.1	86.9	87.2	87.5	87.8	88.2	88.6	88.7	88.7	88.7	88.7	88.8	88.9
GE 1000	73.4	82.0	84.3	86.3	88.3	88.6	88.9	89.4	89.7	90.1	90.4	90.4	90.4	90.4	90.5	90.6
GE 900	73.7	82.8	85.2	87.2	89.2	89.6	89.9	90.4	90.8	91.3	91.6	91.6	91.6	91.6	91.7	91.8
GE 800	73.8	83.2	85.7	87.7	90.0	90.3	90.6	91.2	91.5	92.0	92.5	92.5	92.5	92.5	92.6	92.7
GE 700	74.0	83.4	85.9	88.2	90.5	90.9	91.2	91.8	92.2	92.7	93.2	93.2	93.2	93.2	93.3	93.4
GE 600	74.0	83.4	86.0	88.3	90.6	91.0	91.4	92.2	92.5	93.0	93.5	93.5	93.5	93.5	93.7	93.8
GE 500	74.1	83.8	86.3	88.6	91.0	91.3	91.9	92.7	93.0	93.5	94.1	94.1	94.1	94.1	94.5	94.6
GE 400	74.1	84.1	86.8	89.0	91.4	91.9	92.7	93.5	93.9	94.4	95.1	95.3	95.8	95.8	95.9	96.0
GE 300	74.1	84.1	86.8	89.1	91.8	92.5	93.9	94.9	95.9	96.6	97.2	97.4	98.1	98.3	98.4	98.5
GE 200	74.1	84.1	86.8	89.1	92.0	92.7	94.1	95.3	96.2	97.1	98.3	98.5	99.2	99.5	99.6	99.7
GE 100	74.1	84.1	86.8	89.1	92.0	92.7	94.1	95.3	96.2	97.1	98.3	98.5	99.2	99.5	99.9	100.0
GE 0	74.1	84.1	86.8	89.1	92.0	92.7	94.1	95.3	96.2	97.1	98.3	98.5	99.2	99.5	99.9	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(LST): 0300-0500

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	48.6	49.9	49.9	50.1	50.6	50.6	50.8	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9
GE 20000	51.0	52.3	52.3	52.5	53.0	53.0	53.1	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2
GE 18000	51.0	52.3	52.3	52.5	53.0	53.0	53.1	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2
GE 16000	51.0	52.3	52.3	52.5	53.0	53.0	53.1	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2
GE 14000	51.0	52.3	52.3	52.5	53.0	53.0	53.1	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2	53.2
GE 12000	51.7	53.0	53.0	53.2	53.8	53.8	53.9	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0
GE 10000	56.1	57.5	57.6	57.8	58.6	58.6	58.7	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8	58.8
GE 9000	56.6	58.2	58.3	58.5	59.2	59.2	59.4	59.5	59.5	59.5	59.5	59.5	59.5	59.5	59.5	59.5
GE 8000	59.5	61.1	61.2	61.4	62.2	62.2	62.3	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4
GE 7000	60.3	62.2	62.3	62.5	63.2	63.2	63.3	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4	63.4
GE 6000	62.0	64.0	64.2	64.7	65.6	65.6	65.7	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
GE 5000	63.9	66.8	67.1	67.6	68.6	68.6	68.7	68.8	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9
GE 4500	64.3	67.3	67.6	68.2	69.1	69.1	69.2	69.4	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5
GE 4000	66.3	69.9	70.3	70.9	71.9	71.9	72.0	72.2	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3
GE 3500	67.5	71.3	71.8	72.4	73.5	73.5	73.7	73.8	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9
GE 3000	69.8	74.1	74.9	75.8	77.1	77.1	77.2	77.3	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
GE 2500	70.4	75.5	76.5	77.8	79.1	79.1	79.4	79.5	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6
GE 2000	72.7	78.7	80.0	81.5	82.9	82.9	83.1	83.2	83.3	83.5	83.5	83.5	83.7	83.7	83.7	83.7
GE 1800	73.2	79.6	80.9	82.4	83.8	83.8	84.0	84.1	84.2	84.4	84.4	84.4	84.5	84.5	84.5	84.5
GE 1500	74.2	81.0	82.5	84.0	85.4	85.5	86.0	86.1	86.2	86.6	86.7	86.7	86.9	86.9	86.9	86.9
GE 1200	74.8	82.2	83.7	85.4	87.0	87.1	88.0	88.1	88.2	88.6	88.7	88.7	89.0	89.0	89.0	89.0
GE 1000	75.4	82.9	84.5	86.2	87.8	88.0	88.9	89.1	89.2	89.7	89.8	89.8	90.1	90.1	90.1	90.1
GE 900	75.4	83.3	85.1	86.8	88.5	88.6	89.6	89.8	89.9	90.3	90.6	90.6	91.0	91.0	91.0	91.0
GE 800	75.6	83.8	85.5	87.2	88.9	89.0	90.0	90.2	90.3	91.0	91.5	91.5	91.9	91.9	92.0	92.0
GE 700	75.7	84.2	85.9	87.8	89.7	89.8	90.8	91.0	91.1	91.8	92.4	92.4	92.9	92.9	93.0	93.0
GE 600	75.7	84.4	86.3	88.3	90.3	90.4	91.4	91.6	91.7	92.5	93.0	93.0	93.7	93.7	93.8	93.8
GE 500	75.7	84.4	86.3	88.3	90.3	90.4	91.4	91.6	91.7	92.5	93.0	93.0	93.8	93.8	93.9	93.9
GE 400	75.7	84.7	86.7	88.6	90.8	90.9	92.3	92.6	92.7	93.8	94.3	94.3	95.2	95.2	95.3	95.3
GE 300	75.7	84.7	86.7	88.6	91.2	91.3	93.1	93.7	94.1	95.4	96.5	96.5	97.3	97.4	97.5	97.5
GE 200	75.7	84.7	86.7	88.6	91.2	91.3	93.3	94.2	94.8	96.5	97.7	97.8	98.9	99.1	99.2	99.4
GE 100	75.7	84.7	86.7	88.6	91.2	91.3	93.3	94.2	94.8	96.5	97.7	97.8	98.9	99.1	99.6	99.7
GE	GI	75.7	84.7	86.7	88.6	91.2	91.3	93.3	94.2	94.8	96.5	97.7	97.8	98.9	99.1	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(IST): 0600-0800

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	44.8	47.2	47.7	48.1	48.7	48.7	48.8	48.8	48.8	48.8	48.9	48.9	48.9	49.0	49.0	49.0
GE 20000	47.5	49.9	50.4	50.8	51.4	51.4	51.5	51.5	51.5	51.5	51.6	51.6	51.6	51.7	51.7	51.7
GE 18000	47.6	50.0	50.5	50.9	51.5	51.5	51.6	51.6	51.6	51.6	51.7	51.7	51.7	51.8	51.8	51.8
GE 16000	47.6	50.0	50.5	50.9	51.5	51.5	51.6	51.6	51.6	51.6	51.7	51.7	51.7	51.8	51.8	51.8
GE 14000	48.1	50.4	51.0	51.3	51.9	51.9	52.0	52.0	52.0	52.0	52.2	52.2	52.2	52.3	52.3	52.3
GE 12000	49.1	51.5	52.0	52.4	53.0	53.0	53.2	53.2	53.2	53.2	53.3	53.3	53.3	53.4	53.4	53.4
GE 10000	52.7	55.4	55.9	56.2	56.9	56.9	57.1	57.1	57.1	57.1	57.2	57.2	57.2	57.3	57.3	57.3
GE 9000	53.0	55.7	56.2	56.6	57.2	57.2	57.4	57.4	57.4	57.4	57.5	57.5	57.5	57.6	57.6	57.6
GE 8000	55.9	58.8	59.6	59.9	60.6	60.6	60.9	60.9	60.9	60.9	61.0	61.0	61.0	61.1	61.1	61.1
GE 7000	57.2	60.5	61.3	61.6	62.5	62.5	62.7	62.7	62.7	62.7	62.8	62.8	62.8	62.9	62.9	62.9
GE 6000	58.3	61.8	62.6	63.0	64.0	64.0	64.2	64.3	64.3	64.3	64.4	64.4	64.4	64.5	64.5	64.5
GE 5000	60.0	63.9	65.2	65.6	66.7	66.7	66.9	67.0	67.0	67.0	67.1	67.1	67.1	67.2	67.2	67.2
GE 4500	60.3	64.5	65.8	66.2	67.3	67.3	67.5	67.6	67.6	67.6	67.7	67.7	67.7	67.8	67.8	67.8
GE 4000	61.9	66.8	68.1	68.6	69.8	69.8	70.3	70.4	70.4	70.4	70.5	70.5	70.5	70.6	70.6	70.6
GE 3500	62.6	68.1	69.4	70.0	71.2	71.2	71.7	71.8	71.8	71.8	71.9	71.9	71.9	72.0	72.0	72.0
GE 3000	65.4	71.3	72.7	73.4	74.7	74.7	75.3	75.4	75.4	75.4	75.5	75.5	75.5	75.6	75.6	75.6
GE 2500	67.1	73.2	74.7	75.7	77.0	77.0	77.6	77.7	77.7	77.7	77.8	77.8	77.8	78.0	78.0	78.0
GE 2000	69.5	76.3	78.1	79.1	80.4	80.4	81.2	81.3	81.3	81.4	81.5	81.5	81.5	81.6	81.6	81.6
GE 1800	69.7	76.8	78.5	79.6	80.9	80.9	81.7	81.8	81.8	81.9	82.0	82.0	82.0	82.2	82.2	82.2
GE 1500	70.6	78.4	80.2	81.5	82.9	82.9	84.3	84.5	84.6	84.7	84.8	84.8	84.8	84.9	84.9	84.9
GE 1200	71.3	79.1	81.0	82.5	84.1	84.2	86.3	86.7	86.8	87.2	87.3	87.3	87.3	87.4	87.4	87.4
GE 1000	72.3	80.6	82.6	84.2	85.9	86.0	88.3	88.7	88.8	89.2	89.5	89.5	89.5	89.7	89.7	89.7
GE 900	72.4	81.0	83.0	84.7	86.6	86.7	88.9	89.6	89.7	90.1	90.4	90.4	90.4	90.6	90.6	90.6
GE 800	72.8	81.7	84.0	85.7	87.7	87.8	90.1	90.8	90.9	91.3	91.8	91.8	91.8	92.0	92.0	92.0
GE 700	72.9	82.2	84.4	86.5	88.8	88.9	91.2	91.8	91.9	92.4	93.1	93.1	93.1	93.3	93.3	93.3
GE 600	73.0	82.6	84.8	87.0	89.5	89.6	91.8	92.5	92.6	93.0	93.8	93.8	93.8	94.2	94.4	94.4
GE 500	73.2	82.8	85.2	87.5	90.1	90.2	92.5	93.1	93.2	93.8	94.6	94.6	95.1	95.3	95.3	95.4
GE 400	73.2	83.1	85.5	87.8	90.5	90.8	93.1	93.8	93.9	94.5	95.4	95.6	96.0	96.2	96.2	96.5
GE 300	73.2	83.1	85.5	87.8	90.5	90.8	93.4	94.1	94.6	96.0	96.9	97.1	97.8	98.1	98.1	98.3
GE 200	73.2	83.1	85.5	87.8	90.5	90.8	93.4	94.1	94.6	96.1	97.0	97.2	98.2	98.4	98.4	99.0
GE 100	73.2	83.1	85.6	88.0	90.6	90.9	93.5	94.2	94.7	96.2	97.1	97.3	98.4	98.6	98.8	99.6
GE CI	73.2	83.1	85.6	88.0	90.6	90.9	93.5	94.2	94.7	96.2	97.1	97.3	98.4	98.6	98.9	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(LST): 0900-1100

CEILING IN FEET	VISIBILITY IN STATUTE MILES																
	GE 1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	41.2	45.3	46.9	47.0	47.7	47.8	47.8	48.0	48.0	48.0	48.1	48.1	48.1	48.1	48.3	48.4	
GE 20000	46.0	50.3	52.2	52.3	53.1	53.2	53.2	53.3	53.3	53.3	53.4	53.4	53.4	53.4	53.7	53.8	53.8
GE 18000	46.1	50.4	52.3	52.4	53.2	53.3	53.3	53.4	53.4	53.4	53.5	53.5	53.5	53.5	53.8	53.8	53.9
GE 16000	46.3	50.6	52.5	52.6	53.4	53.5	53.5	53.7	53.7	53.7	53.8	53.8	53.8	53.8	54.0	54.1	
GE 14000	47.2	51.6	53.4	53.5	54.5	54.6	54.6	54.7	54.7	54.7	54.8	54.8	54.8	54.8	55.1	55.2	
GE 12000	48.1	52.5	54.3	54.4	55.5	55.7	55.7	55.8	55.8	55.9	56.0	56.0	56.0	56.0	56.2	56.3	
GE 10000	51.4	56.6	58.5	58.6	59.7	59.9	59.9	60.0	60.0	60.3	60.4	60.4	60.4	60.4	60.6	60.6	
GE 9000	51.6	56.8	58.7	58.8	59.9	60.1	60.1	60.2	60.2	60.5	60.6	60.6	60.6	60.6	60.9	61.0	
GE 8000	54.7	60.8	62.8	63.0	64.1	64.4	64.6	64.7	64.7	65.1	65.2	65.3	65.3	65.3	65.5	65.6	
GE 7000	55.3	61.6	63.9	64.1	65.2	65.5	65.8	65.9	65.9	66.2	66.3	66.5	66.5	66.5	66.7	66.8	
GE 6000	55.9	62.7	65.1	65.3	66.5	66.8	67.5	67.6	67.6	68.0	68.1	68.2	68.2	68.2	68.4	68.5	
GE 5000	57.2	64.8	67.5	68.1	69.5	69.8	70.6	70.9	70.9	71.2	71.3	71.4	71.4	71.4	71.6	71.7	
GE 4500	57.7	65.4	68.1	68.6	70.0	70.3	71.2	71.4	71.4	71.7	71.8	71.9	71.9	71.9	72.2	72.3	
GE 4000	59.2	67.4	70.2	71.0	72.7	73.1	74.1	74.3	74.3	74.8	74.9	75.1	75.1	75.1	75.3	75.4	
GE 3500	59.2	67.5	70.3	71.2	72.9	73.3	74.3	74.5	74.5	75.1	75.2	75.3	75.3	75.3	75.5	75.6	
GE 3000	60.1	68.5	71.4	72.4	74.4	74.8	75.8	76.0	76.0	76.6	76.7	76.8	76.8	76.8	77.0	77.1	
GE 2500	61.5	70.6	73.9	74.9	77.4	77.8	78.9	79.1	79.1	79.7	79.8	79.9	79.9	79.9	80.1	80.3	
GE 2000	63.1	73.1	76.8	78.0	81.1	81.5	82.8	83.1	83.1	83.7	83.8	83.9	83.9	83.9	84.1	84.3	
GE 1800	63.7	73.8	77.4	78.6	81.7	82.2	83.4	83.8	83.8	84.3	84.4	84.5	84.5	84.5	84.7	84.9	
GE 1500	64.4	74.7	78.5	80.0	83.1	83.7	85.2	85.5	85.5	86.2	86.3	86.5	86.5	86.7	86.9	87.1	
GE 1200	65.1	75.7	79.6	81.2	84.3	84.8	86.6	87.0	87.0	88.2	88.4	88.5	88.7	88.7	88.9	89.1	
GE 1000	65.3	76.2	80.1	81.8	84.9	85.5	87.2	87.6	87.6	88.9	89.2	89.4	89.6	89.6	89.8	90.0	
GE 900	65.8	77.0	81.1	83.1	86.3	86.9	88.6	89.1	89.1	90.4	90.8	90.9	91.3	91.5	91.8	92.0	
GE 800	66.1	77.4	81.5	83.5	86.9	87.4	89.2	89.8	89.8	91.1	91.4	91.5	92.0	92.3	92.6	92.8	
GE 700	66.2	78.0	82.0	84.1	87.5	88.1	90.1	90.6	90.6	92.0	92.4	92.5	93.4	93.7	94.0	94.2	
GE 600	66.2	78.0	82.0	84.1	87.6	88.2	90.3	90.9	90.9	92.3	92.8	92.9	93.9	94.1	94.4	94.6	
GE 500	66.2	78.0	82.4	84.6	88.4	89.1	91.4	91.9	91.9	93.4	94.0	94.1	95.1	95.3	95.6	96.1	
GE 400	66.2	78.1	82.7	84.9	88.7	89.7	92.0	92.7	92.7	94.2	94.8	94.9	96.0	96.2	96.6	97.1	
GE 300	66.2	78.1	82.7	85.1	88.8	89.9	92.3	93.1	93.1	94.9	95.8	95.9	97.1	97.3	97.6	98.4	
GE 200	66.2	78.1	82.7	85.1	88.8	89.9	92.3	93.1	93.1	94.9	96.0	96.1	97.7	98.0	98.3	99.4	
GE 100	66.2	78.1	82.7	85.1	88.8	89.9	92.3	93.1	93.1	94.9	96.0	96.1	97.7	98.0	98.5	99.9	
GE 0	66.2	78.1	82.7	85.1	88.8	89.9	92.3	93.1	93.1	94.9	96.0	96.1	97.7	98.0	98.6	100.0	

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(LST): 1200-1400

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	40.4	45.3	45.7	46.1	47.2	47.2	47.4	47.4	47.4	47.8	47.8	47.8	47.8	47.8	48.1	48.1
GE 20000	45.5	51.0	51.4	51.9	53.2	53.2	53.4	53.4	53.4	53.9	53.9	53.9	53.9	53.9	54.1	54.1
GE 18000	45.9	51.4	51.8	52.4	53.7	53.7	53.9	53.9	53.9	54.3	54.3	54.3	54.3	54.3	54.5	54.5
GE 16000	46.1	51.6	52.0	52.6	53.9	53.9	54.1	54.1	54.1	54.5	54.5	54.5	54.5	54.5	54.7	54.7
GE 14000	46.7	52.5	52.9	53.4	54.7	54.7	54.9	54.9	54.9	55.4	55.4	55.4	55.4	55.4	55.6	55.6
GE 12000	47.8	53.9	54.3	54.9	56.3	56.3	56.6	56.6	56.6	57.1	57.1	57.1	57.1	57.1	57.3	57.3
GE 10000	51.5	57.7	58.3	58.9	60.4	60.4	60.6	60.6	60.6	61.2	61.2	61.2	61.2	61.2	61.4	61.4
GE 9000	51.6	57.8	58.5	59.1	60.6	60.6	60.9	60.9	60.9	61.4	61.4	61.4	61.4	61.4	61.6	61.6
GE 8000	53.5	60.8	61.5	62.4	64.2	64.2	64.5	64.6	64.6	65.2	65.2	65.4	65.4	65.4	65.6	65.6
GE 7000	54.2	61.7	62.5	63.4	65.3	65.3	65.6	65.7	65.7	66.2	66.2	66.5	66.5	66.5	66.7	66.7
GE 6000	54.8	63.0	63.8	64.7	66.7	66.8	67.3	67.4	67.4	68.1	68.2	68.4	68.5	68.5	68.7	68.7
GE 5000	56.3	65.3	66.5	67.7	70.2	70.3	71.0	71.1	71.1	71.9	72.0	72.3	72.5	72.5	72.7	72.8
GE 4500	56.3	65.3	66.5	67.7	70.3	70.4	71.2	71.3	71.3	72.2	72.3	72.5	72.7	72.7	72.9	73.0
GE 4000	57.8	67.5	68.9	70.9	73.9	74.0	75.3	75.4	75.4	76.2	76.3	76.6	77.1	77.1	77.3	77.4
GE 3500	58.1	68.0	69.4	71.4	74.4	74.5	75.8	75.9	75.9	76.8	77.0	77.2	77.7	77.7	78.0	78.1
GE 3000	59.1	69.2	70.6	72.7	75.8	75.9	77.4	77.5	77.5	78.4	78.6	78.8	79.4	79.4	79.6	79.7
GE 2500	59.9	70.5	71.9	74.0	77.2	77.5	79.5	79.6	79.6	80.4	80.6	80.9	81.4	81.4	81.6	81.7
GE 2000	61.0	72.3	73.9	76.2	79.8	80.1	82.2	82.4	82.4	83.2	83.4	83.7	84.2	84.2	84.4	84.5
GE 1800	61.4	72.9	74.5	76.9	80.4	80.8	82.8	83.0	83.0	83.9	84.1	84.3	84.8	84.8	85.1	85.2
GE 1500	61.9	74.1	75.7	78.1	81.7	82.0	84.4	84.6	84.6	85.6	85.8	86.0	86.6	86.6	86.8	86.9
GE 1200	62.3	74.8	76.6	79.0	82.9	83.2	85.7	86.0	86.0	87.3	87.6	87.8	88.4	88.4	88.6	88.7
GE 1000	62.4	75.3	77.3	79.8	83.8	84.1	86.6	86.9	86.9	88.4	88.7	88.9	89.5	89.5	89.7	89.8
GE 900	62.5	75.8	78.2	81.0	85.1	85.5	88.1	88.4	88.4	90.0	90.4	90.6	91.2	91.4	91.7	91.8
GE 800	62.6	76.1	78.6	81.4	85.6	86.0	88.7	89.0	89.1	90.9	91.3	91.5	92.2	92.4	92.7	92.8
GE 700	62.7	76.2	78.7	81.5	85.9	86.3	89.1	89.5	89.6	91.3	91.7	91.9	92.8	93.0	93.3	93.4
GE 600	62.7	76.6	79.2	82.3	86.8	87.2	90.0	90.3	90.4	92.2	92.7	92.9	93.8	94.0	94.3	94.4
GE 500	62.8	76.9	80.0	83.1	87.8	88.5	91.4	91.7	91.8	93.5	94.1	94.3	95.4	95.6	95.9	96.3
GE 400	62.8	76.9	80.1	83.2	88.0	88.6	91.6	92.0	92.2	94.0	94.5	94.7	95.9	96.1	96.5	96.9
GE 300	62.8	76.9	80.1	83.2	88.0	88.6	91.6	92.4	92.5	94.8	95.5	95.7	97.1	97.3	97.7	98.3
GE 200	62.8	76.9	80.1	83.2	88.0	88.6	91.6	92.4	92.5	94.8	95.5	95.7	97.6	98.0	98.4	99.4
GE 100	62.8	76.9	80.1	83.2	88.0	88.6	91.6	92.4	92.5	94.8	95.5	95.7	97.6	98.0	98.7	100.0
GE 0	62.8	76.9	80.1	83.2	88.0	88.6	91.6	92.4	92.5	94.8	95.5	95.7	97.6	98.0	98.7	100.0

TOTAL NUMBER OF OBSERVATIONS: 930



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(LST): 1500-1700

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4
NO CEIL	42.7	48.6	48.9	48.9	49.6	49.8	50.0	50.1	50.1	50.2	50.3	50.3	50.3	50.3	50.3	50.3
GE 20000	46.7	53.2	53.7	53.8	54.7	54.9	55.2	55.4	55.4	55.5	55.7	55.7	55.7	55.7	55.7	55.7
GE 18000	46.8	53.3	53.8	53.9	54.8	55.1	55.3	55.5	55.5	55.6	55.8	55.8	55.8	55.8	55.8	55.8
GE 16000	46.9	53.4	53.9	54.0	54.9	55.2	55.4	55.6	55.6	55.7	55.9	55.9	55.9	55.9	55.9	55.9
GE 14000	47.5	54.3	54.7	54.8	55.8	56.0	56.2	56.5	56.5	56.6	56.8	56.8	56.8	56.8	56.8	56.8
GE 12000	48.9	55.7	56.1	56.2	57.2	57.4	57.6	57.8	58.0	58.1	58.3	58.3	58.3	58.3	58.3	58.3
GE 10000	52.8	60.4	60.9	61.1	62.0	62.3	62.5	62.7	62.8	63.2	63.4	63.4	63.4	63.4	63.4	63.4
GE 9000	53.3	61.1	61.5	61.7	62.7	62.9	63.1	63.3	63.4	63.9	64.1	64.1	64.1	64.1	64.1	64.1
GE 8000	54.8	63.7	64.1	64.5	65.7	66.0	66.2	66.5	66.7	67.1	67.3	67.3	67.3	67.3	67.3	67.3
GE 7000	55.6	64.5	64.9	65.4	66.6	66.9	67.1	67.3	67.5	68.0	68.2	68.2	68.2	68.2	68.2	68.2
GE 6000	57.2	67.0	67.4	67.8	69.1	69.5	69.9	70.1	70.3	71.0	71.3	71.3	71.3	71.4	71.4	71.4
GE 5000	58.1	68.7	69.1	69.9	71.6	71.9	72.4	72.6	72.8	73.4	73.8	73.8	73.9	73.9	73.9	73.9
GE 4500	58.6	69.2	69.7	70.4	72.2	72.5	72.9	73.1	73.3	74.0	74.3	74.3	74.3	74.4	74.4	74.4
GE 4000	60.1	71.4	72.2	73.2	75.2	75.7	76.5	76.7	76.9	77.5	77.8	77.8	77.8	78.0	78.0	78.0
GE 3500	60.6	71.9	72.8	73.9	75.8	76.3	77.1	77.3	77.5	78.2	78.5	78.5	78.6	78.6	78.6	78.6
GE 3000	61.6	73.0	74.0	75.1	77.0	77.6	78.4	78.6	78.8	79.6	79.9	79.9	80.0	80.0	80.1	80.3
GE 2500	62.7	74.4	75.5	76.6	78.6	79.5	80.2	80.5	80.8	81.5	82.0	82.0	82.2	82.2	82.3	82.5
GE 2000	63.3	76.1	77.2	78.3	80.5	81.5	82.6	83.0	83.2	84.1	84.7	84.7	84.8	84.8	84.9	85.2
GE 1800	63.4	76.2	77.3	78.4	80.6	81.6	82.7	83.1	83.3	84.2	84.8	84.8	84.9	84.9	85.2	85.4
GE 1500	64.4	78.0	79.0	80.2	82.5	83.4	84.5	85.1	85.3	86.3	87.0	87.0	87.1	87.1	87.3	87.5
GE 1200	64.8	78.5	79.6	80.8	83.0	84.0	85.1	85.6	85.8	87.1	87.8	87.8	88.0	88.0	88.2	88.4
GE 1000	65.2	79.1	80.2	81.5	83.9	84.8	86.0	86.6	86.8	88.2	88.9	88.9	89.2	89.2	89.5	89.8
GE 900	65.2	79.1	80.4	82.2	84.6	85.9	87.2	87.7	88.0	89.4	90.1	90.1	90.5	90.8	91.0	91.3
GE 800	65.2	79.2	80.6	82.6	85.3	86.6	87.8	88.4	88.7	90.2	91.3	91.3	91.8	92.0	92.3	92.6
GE 700	65.2	79.2	80.6	82.7	85.6	86.9	88.3	88.8	89.1	90.6	91.8	91.8	92.4	92.6	92.8	93.1
GE 600	65.5	79.6	81.1	83.5	86.8	88.1	89.5	90.0	90.3	91.8	93.0	93.0	93.5	93.8	94.0	94.3
GE 500	65.5	79.7	81.5	84.1	87.3	88.6	90.0	90.9	91.2	92.7	94.1	94.1	94.6	94.8	95.4	95.7
GE 400	65.5	79.8	81.9	84.5	88.1	89.6	91.2	92.0	92.4	94.0	95.4	95.4	95.9	96.1	96.7	97.0
GE 300	65.5	79.8	81.9	84.5	88.3	89.8	91.5	92.5	92.9	94.8	96.2	96.2	96.8	97.0	97.5	97.8
GE 200	65.5	79.8	82.0	84.6	88.4	89.9	91.6	92.6	93.0	94.9	96.5	96.5	97.7	98.0	98.6	99.1
GE 100	65.5	79.8	82.0	84.6	88.4	89.9	91.6	92.6	93.0	94.9	96.6	96.6	97.8	98.1	99.0	100.0
GE 0	65.5	79.8	82.0	84.6	88.4	89.9	91.6	92.6	93.0	94.9	96.6	96.6	97.8	98.1	99.0	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(IST): 1800-2000

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	42.9	46.6	46.9	47.2	47.3	47.4	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6
GE 20000	46.9	51.0	51.4	51.7	52.0	52.2	52.4	52.4	52.4	52.4	52.7	52.7	52.7	52.7	52.7	52.7
GE 18000	47.1	51.2	51.6	51.9	52.3	52.4	52.6	52.6	52.6	52.6	52.9	52.9	52.9	52.9	52.9	52.9
GE 16000	47.1	51.2	51.6	51.9	52.3	52.4	52.6	52.6	52.6	52.6	52.9	52.9	52.9	52.9	52.9	52.9
GE 14000	48.2	52.6	53.0	53.3	53.7	53.8	54.0	54.0	54.0	54.0	54.3	54.3	54.3	54.3	54.3	54.3
GE 12000	49.5	53.9	54.3	54.6	54.9	55.1	55.3	55.3	55.3	55.3	55.6	55.6	55.6	55.6	55.6	55.6
GE 10000	53.7	58.8	59.4	59.8	60.2	60.3	60.6	60.6	60.6	60.6	61.2	61.2	61.2	61.2	61.2	61.2
GE 9000	54.5	60.0	60.5	61.0	61.4	61.5	61.8	61.8	61.8	62.0	62.4	62.4	62.4	62.4	62.4	62.4
GE 8000	57.3	63.1	63.7	64.1	64.6	64.7	65.1	65.1	65.1	65.3	65.6	65.6	65.6	65.6	65.6	65.6
GE 7000	57.3	63.1	63.7	64.1	64.6	64.7	65.1	65.1	65.1	65.3	65.6	65.6	65.6	65.6	65.6	65.6
GE 6000	58.7	65.1	65.6	66.2	66.9	67.1	67.4	67.4	67.4	67.6	68.0	68.0	68.0	68.0	68.0	68.0
GE 5000	60.4	67.1	68.2	68.9	69.8	70.0	70.3	70.3	70.3	70.5	70.9	70.9	70.9	70.9	70.9	70.9
GE 4500	61.2	67.8	68.9	69.7	70.6	70.9	71.2	71.2	71.2	71.4	71.7	71.7	71.7	71.7	71.7	71.7
GE 4000	62.9	69.8	71.0	72.2	73.4	73.9	74.2	74.2	74.2	74.4	74.7	74.7	74.7	74.7	74.7	74.7
GE 3500	63.5	70.6	71.8	73.0	74.3	74.7	75.1	75.1	75.1	75.3	75.6	75.6	75.6	75.6	75.6	75.6
GE 3000	64.8	72.6	74.1	75.3	76.7	77.1	77.4	77.4	77.4	77.6	78.0	78.0	78.0	78.0	78.0	78.0
GE 2500	67.6	75.8	77.3	78.5	79.9	80.3	80.6	80.6	81.0	81.3	81.6	81.6	81.6	81.6	81.6	81.6
GE 2000	68.9	77.6	79.7	81.0	82.4	83.1	83.7	83.7	84.0	84.3	84.7	84.7	84.7	84.7	84.7	84.7
GE 1800	69.5	78.2	80.2	81.5	82.9	83.7	84.2	84.2	84.5	84.8	85.3	85.3	85.3	85.3	85.3	85.3
GE 1500	70.1	79.1	81.6	83.2	84.6	85.5	86.1	86.3	86.7	87.0	87.4	87.4	87.6	87.6	87.6	87.6
GE 1200	70.2	79.7	82.2	83.8	85.2	86.0	86.7	86.9	87.4	87.7	88.3	88.3	88.5	88.5	88.5	88.5
GE 1000	70.9	80.9	83.4	85.2	86.6	87.4	88.1	88.7	89.5	89.9	90.8	90.8	91.2	91.2	91.2	91.2
GE 900	70.9	81.0	83.7	85.7	87.3	88.5	89.1	89.8	90.5	91.1	91.9	91.9	92.4	92.4	92.4	92.4
GE 800	70.9	81.0	83.7	85.7	87.3	88.5	89.1	89.8	90.5	91.1	91.9	91.9	92.4	92.4	92.4	92.4
GE 700	71.0	81.1	84.0	86.1	88.0	89.1	90.1	90.8	91.5	92.3	93.1	93.1	93.5	93.5	93.5	93.5
GE 600	71.0	81.4	84.5	86.8	88.6	89.8	90.8	91.4	92.2	93.0	93.9	93.9	94.3	94.3	94.3	94.3
GE 500	71.0	81.6	84.7	87.0	89.0	90.2	91.4	92.0	92.8	94.0	95.3	95.3	95.7	95.7	95.7	95.7
GE 400	71.0	81.7	85.1	87.3	89.8	91.0	92.5	93.1	93.9	95.4	96.8	96.8	97.2	97.2	97.2	97.2
GE 300	71.0	81.7	85.2	87.4	90.2	91.4	93.1	93.8	94.8	96.3	97.8	97.8	98.3	98.3	98.3	98.3
GE 200	71.0	81.7	85.2	87.4	90.2	91.4	93.1	93.8	94.8	96.5	98.0	98.0	98.7	99.0	99.1	99.4
GE 100	71.0	81.7	85.2	87.4	90.2	91.4	93.1	93.8	94.8	96.5	98.0	98.0	98.7	99.0	99.5	100.0
GE 0	71.0	81.7	85.2	87.4	90.2	91.4	93.1	93.8	94.8	96.5	98.0	98.0	98.7	99.0	99.5	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86

MONTH: DEC HOURS(LST): 2100-2300

CEILING		VISIBILITY IN STATUTE MILES														
IN FEET	1	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	43.7	45.7	46.1	46.3	46.3	46.5	46.8	46.8	46.8	46.8	46.8	46.8	46.9	46.9	46.9	46.9
GE 20000	46.6	48.7	49.1	49.6	49.8	49.9	50.3	50.3	50.3	50.3	50.5	50.5	50.6	50.6	50.6	50.6
GE 18000	46.6	48.7	49.1	49.6	49.8	49.9	50.3	50.3	50.3	50.3	50.5	50.5	50.6	50.6	50.6	50.6
GE 16000	46.6	48.7	49.1	49.6	49.8	49.9	50.3	50.3	50.3	50.3	50.5	50.5	50.6	50.6	50.6	50.6
GE 14000	48.2	50.4	50.9	51.3	51.5	51.6	52.0	52.0	52.0	52.0	52.3	52.3	52.4	52.4	52.4	52.4
GE 12000	49.6	51.8	52.3	52.7	52.9	53.0	53.4	53.4	53.4	53.4	53.7	53.7	53.8	53.8	53.8	53.8
GE 10000	53.9	56.8	57.3	57.7	58.0	58.1	58.5	58.5	58.5	58.6	58.8	58.8	58.9	58.9	58.9	58.9
GE 9000	54.4	57.6	58.2	58.6	58.8	58.9	59.4	59.4	59.4	59.5	59.7	59.7	59.8	59.8	59.8	59.8
GE 8000	57.8	61.3	61.8	62.3	62.5	62.6	63.0	63.0	63.0	63.1	63.3	63.3	63.4	63.4	63.4	63.4
GE 7000	58.4	61.9	62.5	62.9	63.2	63.3	63.8	63.8	63.8	63.9	64.1	64.1	64.2	64.2	64.2	64.2
GE 6000	60.2	64.2	65.2	65.6	65.9	66.0	66.5	66.5	66.5	66.6	66.8	66.8	66.9	66.9	66.9	66.9
GE 5000	62.8	66.9	68.1	68.8	69.4	69.5	69.9	69.9	69.9	70.0	70.2	70.2	70.3	70.3	70.3	70.3
GE 4500	63.0	67.4	68.6	69.4	69.9	70.0	70.4	70.4	70.4	70.5	70.8	70.8	70.9	70.9	70.9	70.9
GE 4000	64.6	69.1	70.5	71.5	72.3	72.5	72.9	73.0	73.0	73.3	73.5	73.5	73.8	73.8	73.8	73.8
GE 3500	65.1	69.8	71.3	72.3	73.0	73.2	73.7	73.8	73.8	74.1	74.3	74.3	74.5	74.5	74.5	74.5
GE 3000	66.8	72.0	73.9	74.8	75.6	76.0	76.5	76.6	76.6	76.9	77.1	77.1	77.3	77.3	77.3	77.3
GE 2500	69.1	74.8	76.8	78.1	78.9	79.4	79.9	80.0	80.3	80.6	80.9	80.9	81.1	81.1	81.1	81.1
GE 2000	70.0	76.9	79.2	80.5	81.5	82.3	82.9	83.1	83.4	83.8	84.0	84.0	84.2	84.2	84.2	84.2
GE 1800	70.3	77.2	79.7	81.0	81.9	82.7	83.3	83.5	83.9	84.2	84.4	84.4	84.6	84.6	84.6	84.6
GE 1600	71.7	78.9	81.6	82.9	84.0	84.8	85.6	85.8	86.2	86.6	86.8	86.8	87.0	87.0	87.0	87.0
GE 1200	72.4	80.0	82.7	84.0	85.5	86.3	87.2	87.5	88.0	88.3	88.5	88.5	88.7	88.7	88.7	88.7
GE 1000	73.2	81.2	84.0	85.3	86.8	87.6	88.7	89.0	89.7	90.1	90.8	90.8	91.1	91.1	91.1	91.1
GE 900	73.3	81.3	84.1	85.5	87.3	88.3	89.6	89.9	90.5	91.0	91.6	91.6	91.9	91.9	91.9	91.9
GE 800	73.5	81.6	84.4	85.8	87.7	88.7	90.0	90.3	91.0	91.4	92.0	92.0	92.4	92.4	92.4	92.4
GE 700	73.5	81.6	84.4	86.1	88.4	89.4	90.8	91.1	91.7	92.2	92.8	92.8	93.1	93.1	93.1	93.1
GE 600	73.8	82.0	84.8	86.6	88.8	89.8	91.2	91.5	92.2	92.6	93.2	93.2	93.5	93.5	93.5	93.5
GE 500	73.8	82.3	85.1	86.9	89.4	90.3	91.7	92.2	92.8	93.4	94.1	94.1	94.4	94.4	94.4	94.4
GE 400	73.8	82.3	85.1	87.0	89.8	90.8	92.5	92.9	93.5	94.4	95.2	95.2	95.7	95.7	95.7	95.7
GE 300	73.8	82.3	85.2	87.4	90.5	91.5	93.3	94.0	94.8	96.2	97.1	97.1	98.0	98.0	98.0	98.2
GE 200	73.8	82.4	85.3	87.5	90.6	91.6	93.4	94.1	95.1	96.8	97.6	97.6	98.8	99.0	99.1	99.4
GE 100	73.8	82.4	85.3	87.5	90.6	91.6	93.4	94.1	95.1	96.8	97.6	97.7	98.9	99.2	99.7	100.0
GE 0	73.8	82.4	85.3	87.5	90.6	91.6	93.4	94.1	95.1	96.8	97.6	97.7	98.9	99.2	99.7	100.0

TOTAL NUMBER OF OBSERVATIONS: 930

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(IST): ALL

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	43.9	47.1	47.6	47.8	48.3	48.4	48.6	48.6	48.6	48.7	48.8	48.8	48.8	48.8	48.8	48.9
GE 20000	47.4	50.9	51.4	51.7	52.3	52.4	52.6	52.6	52.6	52.7	52.8	52.8	52.9	52.9	52.9	53.0
GE 18000	47.5	51.0	51.5	51.8	52.4	52.5	52.7	52.8	52.8	52.8	53.0	53.0	53.0	53.0	53.1	53.1
GE 16000	47.5	51.0	51.6	51.9	52.5	52.6	52.8	52.8	52.8	52.9	53.0	53.0	53.1	53.1	53.1	53.2
GE 14000	48.2	51.9	52.4	52.7	53.3	53.4	53.6	53.7	53.7	53.7	53.9	53.9	53.9	53.9	54.0	54.0
GE 12000	49.3	53.0	53.6	53.8	54.5	54.6	54.8	54.9	54.9	55.0	55.1	55.1	55.1	55.1	55.2	55.2
GE 10000	53.3	57.4	58.1	58.3	59.1	59.2	59.4	59.4	59.5	59.7	59.8	59.8	59.8	59.8	59.9	59.9
GE 9000	53.7	58.0	58.6	58.9	59.7	59.8	60.0	60.0	60.1	60.3	60.4	60.4	60.4	60.4	60.5	60.5
GE 8000	56.4	61.3	61.9	62.3	63.1	63.3	63.5	63.6	63.6	63.8	64.0	64.0	64.0	64.0	64.1	64.1
GE 7000	57.1	62.2	62.9	63.3	64.1	64.2	64.5	64.6	64.6	64.8	65.0	65.0	65.0	65.0	65.1	65.1
GE 6000	58.4	63.9	64.7	65.2	66.1	66.3	66.7	66.7	66.8	67.1	67.2	67.3	67.3	67.3	67.4	67.4
GE 5000	60.1	66.2	67.3	68.0	69.2	69.4	69.7	69.9	69.9	70.2	70.4	70.4	70.5	70.5	70.6	70.6
GE 4500	60.6	66.8	67.9	68.6	69.8	70.0	70.3	70.5	70.5	70.8	71.0	71.0	71.1	71.1	71.2	71.2
GE 4000	62.2	68.9	70.2	71.1	72.6	72.8	73.4	73.5	73.6	73.9	74.1	74.1	74.2	74.2	74.3	74.4
GE 3500	62.8	69.7	71.1	72.0	73.5	73.8	74.3	74.4	74.5	74.8	75.0	75.1	75.2	75.2	75.2	75.3
GE 3000	64.5	71.8	73.3	74.4	76.0	76.3	76.8	76.9	77.0	77.4	77.6	77.6	77.7	77.7	77.8	77.9
GE 2500	65.9	73.8	75.4	76.7	78.4	78.8	79.4	79.6	79.7	80.1	80.3	80.3	80.5	80.5	80.6	80.6
GE 2000	67.3	76.0	78.0	79.4	81.3	81.7	82.6	82.8	82.9	83.3	83.6	83.6	83.7	83.8	83.8	83.9
GE 1800	67.7	76.5	78.5	79.9	81.8	82.2	83.1	83.3	83.4	83.9	84.1	84.1	84.2	84.3	84.4	84.4
GE 1500	68.6	77.8	79.9	81.5	83.5	84.0	85.0	85.3	85.5	86.0	86.2	86.3	86.5	86.5	86.6	86.6
GE 1200	69.2	78.9	81.0	82.7	84.9	85.4	86.6	86.9	87.2	87.9	88.2	88.2	88.4	88.4	88.5	88.6
GE 1000	69.7	79.8	82.1	83.8	86.0	86.5	87.8	88.3	88.5	89.3	89.8	89.8	90.1	90.1	90.2	90.3
GE 900	69.9	80.2	82.6	84.5	86.9	87.5	88.9	89.3	89.6	90.4	90.9	91.0	91.3	91.4	91.5	91.6
GE 800	70.1	80.5	83.0	85.0	87.4	88.1	89.5	89.9	90.2	91.1	91.7	91.8	92.2	92.3	92.4	92.5
GE 700	70.1	80.7	83.3	85.4	88.1	88.7	90.2	90.7	91.0	91.9	92.6	92.6	93.1	93.2	93.4	93.5
GE 600	70.2	81.0	83.6	85.8	88.6	89.2	90.8	91.3	91.6	92.5	93.2	93.3	93.8	93.9	94.0	94.1
GE 500	70.3	81.2	83.9	86.3	89.2	89.8	91.5	92.0	92.3	93.4	94.2	94.2	94.8	94.9	95.1	95.3
GE 400	70.3	81.3	84.2	86.6	89.6	90.4	92.2	92.8	93.1	94.3	95.2	95.3	96.0	96.1	96.3	96.5
GE 300	70.3	81.3	84.2	86.7	89.9	90.7	92.8	93.5	94.1	95.6	96.6	96.7	97.6	97.7	97.9	98.2
GE 200	70.3	81.3	84.3	86.7	90.0	90.8	92.9	93.7	94.3	96.0	97.1	97.2	98.4	98.6	98.8	99.3
GE 100	70.3	81.3	84.3	86.7	90.0	90.8	92.9	93.7	94.3	96.0	97.1	97.2	98.4	98.7	99.2	99.9
GE 0	70.3	81.3	84.3	86.7	90.0	90.8	92.9	93.7	94.3	96.0	97.1	97.2	98.4	98.7	99.2	100.0

TOTAL NUMBER OF OBSERVATIONS: 7440

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-87  
MONTH: ALL HOURS(LST): ALL

CEILING IN FEET	VISIBILITY IN STATUTE MILES															
	GE 10	GE 6	GE 5	GE 4	GE 3	GE 2 1/2	GE 2	GE 1 1/2	GE 1 1/4	GE 1	GE 3/4	GE 5/8	GE 1/2	GE 5/16	GE 1/4	GE 0
NO CEIL	50.1	52.4	52.7	53.0	53.3	53.3	53.4	53.5	53.5	53.6	53.6	53.6	53.6	53.6	53.7	53.7
GE 20000	55.1	57.7	58.1	58.4	58.7	58.7	58.9	58.9	58.9	59.0	59.0	59.0	59.1	59.1	59.1	59.2
GE 18000	55.2	57.8	58.3	58.5	58.9	58.9	59.0	59.1	59.1	59.2	59.2	59.2	59.3	59.3	59.3	59.3
GE 16000	55.3	57.9	58.3	58.6	58.9	59.0	59.1	59.1	59.2	59.2	59.3	59.3	59.3	59.3	59.4	59.4
GE 14000	56.1	58.8	59.2	59.5	59.8	59.9	60.0	60.1	60.1	60.1	60.2	60.2	60.2	60.2	60.3	60.3
GE 12000	57.2	60.0	60.4	60.7	61.1	61.1	61.2	61.3	61.3	61.4	61.4	61.4	61.4	61.5	61.5	61.5
GE 10000	61.0	64.2	64.6	64.9	65.3	65.4	65.5	65.6	65.6	65.7	65.7	65.7	65.8	65.8	65.8	65.8
GE 9000	61.5	64.7	65.2	65.5	65.9	66.0	66.1	66.2	66.2	66.3	66.3	66.3	66.3	66.4	66.4	66.4
GE 8000	64.4	67.8	68.4	68.8	69.2	69.3	69.4	69.5	69.5	69.6	69.6	69.6	69.7	69.7	69.7	69.8
GE 7000	65.5	69.1	69.7	70.1	70.6	70.6	70.8	70.9	70.9	71.0	71.0	71.0	71.1	71.1	71.1	71.1
GE 6000	67.0	70.9	71.5	72.0	72.5	72.5	72.7	72.8	72.8	72.9	73.0	73.0	73.0	73.0	73.1	73.1
GE 5000	69.3	73.6	74.3	74.8	75.4	75.4	75.7	75.7	75.8	75.9	75.9	75.9	76.0	76.0	76.0	76.1
GE 4500	69.8	74.2	74.9	75.5	76.1	76.1	76.4	76.4	76.5	76.6	76.6	76.6	76.7	76.7	76.7	76.8
GE 4000	71.9	76.7	77.6	78.2	78.9	79.0	79.3	79.4	79.4	79.6	79.6	79.6	79.7	79.7	79.7	79.8
GE 3500	72.7	77.7	78.6	79.2	79.9	80.0	80.3	80.5	80.5	80.6	80.7	80.7	80.8	80.8	80.8	80.9
GE 3000	74.6	80.0	81.0	81.7	82.6	82.7	83.0	83.2	83.2	83.4	83.4	83.4	83.5	83.5	83.6	83.6
GE 2500	76.0	81.8	82.8	83.6	84.6	84.8	85.1	85.3	85.3	85.5	85.6	85.6	85.7	85.7	85.7	85.8
GE 2000	77.5	83.7	84.9	85.8	86.9	87.1	87.6	87.8	87.8	88.0	88.1	88.1	88.2	88.2	88.3	88.3
GE 1800	77.7	84.1	85.3	86.2	87.3	87.6	88.0	88.2	88.3	88.5	88.6	88.6	88.7	88.7	88.8	88.8
GE 1500	78.7	85.4	86.8	87.7	88.9	89.2	89.8	90.0	90.0	90.3	90.4	90.4	90.5	90.6	90.6	90.6
GE 1200	79.5	86.7	88.2	89.2	90.5	90.8	91.5	91.8	91.8	92.1	92.3	92.3	92.4	92.4	92.5	92.5
GE 1000	79.9	87.5	89.1	90.2	91.6	91.9	92.7	93.0	93.1	93.4	93.6	93.6	93.8	93.8	93.9	93.9
GE 900	80.2	88.0	89.6	90.8	92.3	92.7	93.4	93.8	93.9	94.3	94.5	94.5	94.6	94.7	94.7	94.8
GE 800	80.3	88.3	90.0	91.3	92.8	93.2	94.0	94.4	94.5	94.9	95.1	95.2	95.3	95.4	95.4	95.5
GE 700	80.5	88.6	90.4	91.7	93.3	93.7	94.6	95.0	95.1	95.6	95.8	95.9	96.1	96.1	96.2	96.2
GE 600	80.6	88.8	90.7	92.1	93.8	94.2	95.1	95.6	95.7	96.2	96.5	96.5	96.7	96.8	96.8	96.9
GE 500	80.6	89.0	91.0	92.5	94.3	94.7	95.7	96.3	96.4	97.0	97.3	97.3	97.6	97.6	97.7	97.8
GE 400	80.7	89.2	91.2	92.8	94.7	95.2	96.3	96.9	97.1	97.7	98.0	98.0	98.3	98.4	98.5	98.5
GE 300	80.7	89.2	91.3	92.9	94.9	95.3	96.5	97.2	97.5	98.2	98.5	98.6	98.9	99.0	99.1	99.2
GE 200	80.7	89.2	91.3	92.9	94.9	95.4	96.6	97.3	97.6	98.4	98.8	98.8	99.3	99.4	99.5	99.7
GE 100	80.7	89.2	91.3	92.9	94.9	95.4	96.6	97.3	97.6	98.4	98.8	98.9	99.3	99.4	99.7	99.9
GE CI	80.7	89.2	91.3	92.9	94.9	95.4	96.6	97.3	97.6	98.4	98.8	98.9	99.3	99.4	99.7	100.0

TOTAL NUMBER OF OBSERVATIONS: 87642

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JAN

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	31.7			18.8						11.0	38.5	5.4	911
03-05	33.6			14.1						13.7	38.6	5.5	911
06-08	26.3			21.1						14.8	37.8	5.7	920
09-11	13.1			23.6						23.2	40.2	6.8	919
12-14	13.5			25.3						22.2	39.0	6.7	916
15-17	12.6			26.1						20.2	41.1	6.7	918
18-20	17.2			27.8						17.1	37.9	6.2	920
21-23	26.3			20.8						13.6	39.3	5.8	920
TOTALS	21.8			22.2						17.0	39.1	6.1	7335

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: FEB

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	27.5			14.9						10.6	47.0	6.1	843
03-05	29.4			12.6						12.0	46.1	6.1	844
06-08	16.4			25.6						15.9	42.1	6.4	845
09-11	9.7			22.9						18.7	48.6	7.2	843
12-14	9.0			22.5						19.5	49.0	7.3	836
15-17	5.6			25.5						20.5	48.4	7.4	839
18-20	9.4			31.2						16.4	43.0	6.7	842
21-23	22.0			19.3						13.1	45.6	6.3	845
TOTALS	16.1			21.8						15.8	46.2	6.7	6737

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAR

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS   (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	28.3			16.6						12.1	43.1	5.9	929
03-05	27.0			16.2						14.9	41.8	6.0	930
06-08	14.8			25.2						17.2	42.8	6.6	928
09-11	9.9			25.6						22.0	42.5	7.0	927
12-14	7.3			27.6						23.6	41.6	7.1	929
15-17	5.2			27.8						26.5	40.6	7.3	929
18-20	6.8			34.1						18.2	40.9	6.8	928
21-23	21.6			25.6						12.7	40.0	5.9	929
TOTALS	15.1			24.8						18.4	41.7	6.6	7429

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: APR

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS   (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	37.0			20.9						13.4	28.7	4.7	895
03-05	32.4			24.1						11.0	30.5	4.9	895
06-08	15.7			28.7						23.1	32.5	6.2	898
09-11	14.6			26.8						22.4	36.2	6.4	898
12-14	9.1			27.1						29.1	34.7	6.9	900
15-17	6.6			31.0						28.3	34.0	6.9	896
18-20	6.1			38.0						26.4	29.5	6.5	899
21-23	28.0			27.9						15.4	28.7	5.1	900
TOTALS	18.7			28.1						21.4	31.9	6.0	7181

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAY

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	29.8			25.1						15.6	29.5	5.1	925
03-05	20.1			31.6						18.2	30.2	5.6	922
06-08	9.6			29.9						28.1	32.5	6.7	921
09-11	7.7			34.3						24.7	33.3	6.6	926
12-14	4.5			33.1						28.7	33.7	6.9	924
15-17	4.2			29.9						32.7	33.2	7.2	927
18-20	4.8			37.4						31.2	26.7	6.6	923
21-23	14.8			40.2						20.9	24.1	5.5	924
TOTALS	11.9			32.7						25.0	30.4	6.3	7392

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUN

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	23.1			34.1						18.4	24.5	5.1	898
03-05	12.9			37.7						25.2	24.2	5.8	900
06-08	10.6			34.0						29.2	26.3	6.3	898
09-11	6.8			38.6						26.7	28.0	6.4	900
12-14	4.2			40.1						31.3	24.3	6.5	900
15-17	2.3			44.3						30.0	23.4	6.4	897
18-20	3.6			45.4						33.3	17.8	6.1	899
21-23	7.6			47.9						24.5	20.0	5.6	897
TOTALS	8.9			40.3						27.3	23.6	6.0	7189



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUL

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	31.5			34.6						16.4	17.3	4.3	928
03-05	19.0			39.5						21.0	20.5	5.1	925
06-08	10.3			38.7						28.9	22.1	6.0	924
09-11	8.3			40.6						31.2	19.9	6.0	929
12-14	3.0			48.1						34.6	14.3	6.0	930
15-17	2.5			49.9						35.5	12.2	5.9	930
18-20	4.1			49.9						33.7	12.3	5.8	927
21-23	10.5			55.0						22.7	11.9	4.9	926
TOTALS	11.2			44.6						28.0	16.3	5.5	7419

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	34.6			35.4						14.3	15.7	3.9	920
03-05	25.2			36.2						16.8	21.8	4.8	921
06-08	10.6			37.6						29.3	22.4	6.0	914
09-11	8.2			39.5						27.7	24.6	6.1	927
12-14	5.2			42.6						29.6	22.6	6.2	928
15-17	4.3			46.4						31.3	17.9	6.0	926
18-20	4.7			51.4						29.9	14.1	5.6	924
21-23	16.6			51.5						17.2	14.6	4.6	922
TOTALS	13.7			42.6						24.5	19.2	5.4	7382

GLOBAL CLIMATOLOGY BRANCH  
LSAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND PERIOD OF RECORD: 77-86  
MONTH: SEP

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS   (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	35.2			26.1						13.2	25.5	4.5	897
03-05	33.1			24.9						15.8	26.1	4.8	896
06-08	8.3			35.8						27.6	28.4	6.4	895
09-11	9.6			30.2						25.4	34.8	6.7	900
12-14	7.2			30.4						27.7	34.7	6.9	900
15-17	5.3			34.6						28.4	31.7	6.8	900
18-20	8.7			39.4						27.3	24.6	6.1	900
21-23	24.8			34.1						15.1	25.9	5.0	898
TOTALS	16.5			31.9						22.6	29.0	5.9	7186

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND PERIOD OF RECORD: 77-86  
MONTH: OCT

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS   (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	29.2			20.2						11.2	39.4	5.6	926
03-05	30.2			19.6						12.9	37.4	5.5	925
06-08	13.1			31.8						19.3	35.8	6.3	918
09-11	6.6			27.9						27.9	37.7	7.1	926
12-14	6.5			28.5						26.1	38.9	7.1	927
15-17	9.1			26.6						27.0	37.2	7.0	929
18-20	14.9			29.2						19.5	36.4	6.3	928
21-23	25.1			21.7						14.4	38.9	5.8	926
TOTALS	16.8			25.7						19.8	37.7	6.3	7405

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS   (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	25.0			16.4						13.0	45.6	6.2	899
03-05	23.6			20.1						12.8	43.5	6.1	897
06-08	13.8			25.2						17.7	43.3	6.7	897
09-11	7.2			24.4						22.0	46.4	7.4	899
12-14	7.3			26.7						18.7	47.3	7.2	899
15-17	5.0			26.9						22.8	45.3	7.4	899
18-20	11.9			24.7						18.0	45.4	6.9	900
21-23	19.8			18.4						13.3	48.5	6.6	899
TOTALS	14.2			22.9						17.3	45.7	6.8	7189

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC

PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER													
HOURS   (LST)	0	1	2	3	4	5	6	7	8	9	10	MEAN	TOTAL OBS
00-02	27.9			16.7						14.8	40.6	5.9	926
03-05	28.0			18.0						14.9	39.1	5.8	930
06-08	20.8			23.0						16.6	39.6	6.1	929
09-11	9.4			28.6						21.1	40.9	6.8	925
12-14	10.5			25.3						22.1	42.0	7.0	921
15-17	9.0			28.2						22.2	40.6	6.9	924
18-20	16.1			25.6						13.1	45.2	6.5	925
21-23	24.6			17.7						13.6	44.1	6.2	926
TOTALS	18.3			22.9						17.3	41.5	6.4	7406

GLOBAL CLIMATOLOGY BRANCH  
LSAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-87  
MONTH: ALL

		PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER										MEAN	TOTAL OBS
	HOURS (LST)	0	1	2	3	4	5	6	7	8	9	10	
JAN	ALL	21.8			22.2						17.0	39.1	6.1 7335
FEB		16.1			21.8						15.8	46.2	6.7 6737
MAR		15.1			24.8						18.4	41.7	6.6 7429
APR		18.7			28.1						21.4	31.9	6.0 7181
MAY		11.9			32.7						25.0	30.4	6.3 7392
JUN		8.9			40.3						27.3	23.6	6.0 7189
JUL		11.2			44.6						28.0	16.3	5.5 7419
AUG		13.7			42.6						24.5	19.2	5.4 7382
SEP		16.5			31.9						22.6	29.0	5.9 7186
OCT		16.8			25.7						19.8	37.7	6.3 7405
NOV		14.2			22.9						17.3	45.7	6.8 7189
DEC		18.3			22.9						17.3	41.5	6.4 7406
TOTALS		15.3			30.0						21.2	33.5	6.2 87250

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## TEMPERATURE AND RELATIVE HUMIDITY SUMMARIES

### CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE OF DAILY MAXIMUM (MINIMUM AND MEAN) TEMPERATURES

DATA DERIVED FROM SUMMARY OF DAY DATA.

PERCENTAGE TABULATIONS PRESENTED BY 5-DEGREE FAHRENHEIT INCREMENTS PLUS THE MEAN, STANDARD DEVIATIONS AND TOTAL OBSERVATION COUNT.

THE MINIMUM TABLE ALSO INCLUDES A 33 FAHRENHEIT DEGREE INCREMENT.

SINCE MANY STATIONS/SITES DO NOT HAVE MAXIMUM/MINIMUM THERMOMETERS, THESE TEMPERATURES WERE SELECTED BY SCANNING THE HOURLY OBSERVATIONS FOR THE HIGHEST AND LOWEST VALUES.

STATISTICS DO NOT INCLUDE INCOMPLETE MONTHS (THOSE CONTAINING ASTERISKS).

FOUR OR MORE COMPLETE MONTHS ARE REQUIRED FOR COMPUTATION AND DISPLAY OF STATISTICAL VALUES.

### EXTREME MAXIMUM AND MINIMUM VALUES

DATA DERIVED FROM SUMMARY OF DAY DATA.

PRESENTED ARE THE HIGHEST (LOWEST) TEMPERATURE FOR THE MONTH FOR EACH YEAR.

ALSO PRESENTED ARE STATISTICAL VALUES WITH THE SAME LIMITATIONS MENTIONED ABOVE.

AN ASTERISK INDICATES AN INCOMPLETE MONTH.

### MEANS AND STANDARD DEVIATIONS FOR DRY BULB (WET BULB AND DEW POINT) TEMPERATURES

DATA DERIVED FROM HOURLY OBSERVATIONS.

DATA PRESENTED BY THE STANDARD 3-HOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED).

PRESENTED ARE MEANS, STANDARD DEVIATION AND OBSERVATION COUNTS.

### CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE OF RELATIVE HUMIDITY

DATA DERIVED FROM HOURLY OBSERVATIONS.

SUMMARIZED BY THE STANDARD 3-HOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED).

PERCENTAGE VALUES PRESENTED IN 10 DEGREE INCREMENTS OF RELATIVE HUMIDITY.

ALSO PRESENTED ARE THE MEAN VALUES AND OBSERVATION COUNTS.

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

CUMULATIVE PERCENTAGE OF OCCURRENCE OF MAXIMUM TEMPERATURES  
FROM SUMMARY OF DAY DATA

STATION NUMBER: 727575

STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 59-87

TEMP(F)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
GE 105I								.1					.C
GE 100I					.1		.1	1.0	.2				.1
GE 95I				.1	.5	.7	2.6	3.8	1.2				.7
GE 90I					2.0	4.6	11.2	14.0	3.1				2.9
GE 85I				1.0	6.8	13.7	28.2	27.7	7.9	.5			7.1
GE 80I				2.0	14.2	30.1	58.3	47.8	15.4	2.1			14.2
GE 75I			.1	4.2	25.3	51.9	81.1	67.9	26.1	5.2			21.9
GE 70I			.3	7.6	41.4	72.9	95.0	86.6	40.6	11.3			29.7
GE 65I			.8	15.8	57.0	89.0	99.2	94.7	57.4	20.9	1.1		36.4
GE 60I			2.2	26.2	72.6	97.0	99.9	98.9	73.7	33.9	2.6		42.3
GE 55I		.1	4.5	39.6	83.4	99.5	100.0	100.0	87.3	50.8	6.0	.1	47.7
GE 50I			7.8	53.6	91.1	99.9			94.6	66.2	11.5	.6	52.2
GE 45I	.1	1.5	13.8	67.1	96.9	100.0			98.6	80.8	19.4	1.7	56.8
GE 40I	2.4	4.7	24.4	78.3	99.0				100.0	90.7	29.3	4.1	61.2
GE 35I	7.4	13.0	42.9	90.2	99.7					96.4	47.3	11.2	67.5
GE 30I	16.0	26.2	60.0	96.4	99.9					99.4	67.3	24.2	74.2
GE 25I	25.3	40.8	73.7	98.7	100.0					99.9	79.9	37.9	79.8
GE 20I	34.3	52.1	82.8	99.8						100.0	87.9	49.5	83.9
GE 15I	44.4	61.6	89.6	100.0							93.2	62.8	87.7
GE 10I	54.4	71.7	96.0								96.9	74.7	91.2
GE 5I	65.3	82.4	99.3								98.8	83.4	94.1
GE 0I	76.3	90.0	99.8								99.3	89.9	96.3
GE -5I	86.5	95.7	100.0								99.9	96.2	98.2
GE -10I	93.5	98.5									100.0	98.6	99.2
GE -15I	98.3	99.7										99.8	99.8
GE -20I	99.7	99.9										100.0	100.0
GE -25I	100.0	100.0											100.0
MEAN	12.3	18.9	31.9	50.9	66.3	75.0	80.8	79.1	67.3	54.9	34.1	18.8	49.2
SD	15.036	14.035	12.620	13.059	11.949	8.552	6.934	6.893	11.429	11.628	12.718	13.529	26.848
TOTAL OBS	868	791	868	840	868	840	868	837	840	868	840	868	10196

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE OF OCCURRENCE OF MINIMUM TEMPERATURES  
FROM SUMMARY OF DAY DATA

STATION NUMBER: 727575

STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 59-87

TEMP(F)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
GE 75I						.1		.1					.C
GE 70I						.6	2.2	1.2					.3
GE 65I					.5	4.4	12.6	7.3	1.5				2.2
GE 60I					3.1	17.9	41.0	26.0	4.5	.3			7.8
GE 55I				.4	9.7	42.7	69.9	53.0	13.2	1.0			15.9
GE 50I				1.1	22.6	67.0	89.9	78.4	28.8	4.1			24.3
GE 45I				4.5	42.6	86.0	98.3	92.4	51.0	13.5	.4		32.4
GE 40I			.7	14.3	63.8	96.5	99.9	98.4	78.9	29.3	2.5		40.1
GE 35I	.1	.1	4.4	34.5	80.1	99.6	100.0	99.4	91.7	51.6	6.1	.1	47.4
GE 30I	.3	.5	9.2	44.6	87.6	99.8		100.0	94.9	60.8	9.6	.3	50.7
GE 25I	.9	2.4	18.1	62.3	94.2	99.9			96.9	74.7	18.0	1.3	55.8
GE 20I	2.2	7.3	33.2	82.6	98.4	100.0			99.3	90.3	36.0	5.9	63.1
GE 15I	7.1	15.5	44.4	92.6	99.8				100.0	96.5	52.6	13.2	68.6
GE 10I	12.7	25.0	55.3	96.5	99.9					98.8	68.3	23.8	73.5
GE 5I	19.8	35.0	66.5	98.5						99.8	79.2	36.1	78.0
GE 0I	27.6	43.5	75.9	99.0						100.0	87.5	45.7	81.7
GE -5I	36.8	55.2	84.3	99.8	100.0						92.7	57.1	85.5
GE -10I	49.7	66.5	92.5	100.0							96.2	69.4	89.6
GE -15I	61.8	78.1	96.8								98.6	81.5	93.1
GE -20I	74.5	87.9	98.6								98.8	90.7	95.9
GE -25I	87.4	94.6	99.8								99.5	96.4	98.1
GE -30I	94.6	98.1	99.9								99.9	98.8	99.3
GE -35I	98.8	99.5									100.0	99.9	99.8
GE -40I	100.0	99.9	100.0									100.0	100.0
GE -45I		100.0											100.0
MEAN	-4.4	2.4	15.5	31.3	42.8	52.7	57.7	54.8	45.0	34.9	18.8	3.0	29.5
SD	14.374	14.875	13.789	8.330	8.933	7.275	6.126	6.957	8.251	8.463	11.984	13.810	23.603
TOTAL OBS	868	791	868	840	868	840	868	837	840	868	840	868	10196



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE OF OCCURRENCE OF MEAN TEMPERATURES  
FROM SUMMARY OF DAY DATA

STATION NUMBER: 727575

STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 59-87

TEMP(F)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
GE 85							.1	.7					.1
GE 80					.5	1.0	4.3	3.2	1.0				.8
GE 75					1.5	8.3	19.7	16.0	3.2				4.1
GE 70				.1	6.3	23.7	49.1	39.3	8.0	.5			10.6
GE 65				1.2	15.9	44.2	79.6	63.4	17.6	2.0			18.7
GE 60				3.5	31.3	73.3	95.6	85.4	33.8	5.8			27.4
GE 55			.5	8.3	51.5	93.2	99.5	96.7	57.0	15.7			35.3
GE 50			1.3	19.8	70.5	98.2	100.0	99.6	78.3	30.8	1.9		41.8
GE 45			3.7	37.0	85.3	99.6		100.0	91.2	53.2	5.1		48.0
GE 40		.4	9.8	59.6	94.9	100.0			98.0	73.4	12.9	.2	54.2
GE 35	.7	2.3	22.0	76.7	98.8				99.9	88.0	24.2	2.0	59.7
GE 30	3.1	9.1	38.4	89.3	99.7				100.0	95.7	42.5	7.5	65.6
GE 25	8.6	19.8	50.1	95.7	99.8					98.6	62.0	17.6	71.1
GE 20	17.9	32.7	64.5	98.3	99.9					99.9	75.6	30.0	76.6
GE 15	27.6	42.9	75.8	99.3	100.0					100.0	85.0	43.4	81.2
GE 10	36.1	53.4	84.8	99.9							91.5	54.4	85.1
GE 5	46.8	64.9	92.5	100.0							95.8	66.1	88.9
GE 0	57.8	75.3	96.7								98.0	78.5	92.2
GE -5	68.9	85.2	99.5								98.9	87.3	95.0
GE -10	81.2	93.6	99.9								99.5	94.5	97.4
GE -15	91.4	97.2	100.0								99.9	97.8	98.9
GE -20	97.4	99.1									100.0	99.4	99.7
GE -25	99.7	99.9										100.0	100.0
GE -30	100.0	100.0											100.0
MEAN	4.0	10.7	24.0	41.4	54.8	64.1	69.5	67.2	56.4	45.2	26.7	11.0	39.6
SD	14.448	14.115	12.665	9.853	9.491	7.051	5.743	7.067	8.874	9.076	11.771	13.280	24.978
TOTAL OBS	868	791	868	840	868	840	868	837	840	868	840	868	10196

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

EXTREME VALUES OF MAXIMUM TEMPERATURE  
(FROM DAILY OBSERVATIONS)

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 59-87

YEAR	WHOLE DEGREES FAHRENHEIT												ALL MONTHS
	JAN	FEB	MAR	APR	MAY	-M-O-N-T-H-S-		AUG	SEP	OCT	NOV	DEC	
						JUN	JUL						
59									98	73	43	43	
60	35	40	46	70	88	87	98	95	95	85	53	41	98
61	43	40	64	71	85	97	95	102	87	84	62	31	102
62	40	40	36	78	79	88	85	92	86	79	53	52	92
63	42	56	79	80	87	94	96	93	90	85	61	41	96
64	41	42	54	74	100	91	96	95	81	80	63	32	100
65	32	40	40	76	85	83	87	98	70	74	69	46	98
66	16	35	54	64	88	90	88	90	87	81	42	37	90
67	38	38	70	61	86	86	92	94	87	78	58	49	94
68	42	39	62	83	86	97	88	92	87	76	53	39	97
69	30	34	35	69	94	78	96	96	91	66	56	57	96
70	31	39	37	68	92	99	97	95	96	85	54	34	99
71	38	41	54	75	82	85	89	94	92	68	46	33	94
72	41	37	51	64	90	93	90	96	81	72	50	37	96
73	44	43	59	75	83	92	95	95	79	74	55	35	95
74	28	38	40	78	78	92	96	91	89	80	55	49	96
75	37	37	52	59	82	85	99	89	84	88	74	38	99
76	37	47	50	75	87	91	94	101	97	84	61	42	101
77	33	47	62	86	88	89	94	84	78	75	59	34	94
78	30	32	57	72	85	88	96	100	101	76	71	36	101
79	23	24	35	60	85	92	90	89	94	69	52	50	94
80	40	32	49	99	97	93	101	93	93	82	61	45	101
81	46	48	65	82	85	80	96	93	90	68	65	38	96
82	33	43	46	84	82	82	89	93	91	71	52	51	93
83	35	46	42	74	79	89	98	104	101	77	65	24	104
84	39	46	50	68	91	90	94	105	89	77	51	39	105
85	34	42	59	86	93	84	98	89	76	67	55	35	98
86	42	36	69	76	95	93	90	93	76	73	53	36	95
87	42	40	51	87	93	95	95						
MEAN	36.1	40.1	52.4	74.8	87.3	89.4	93.6	94.5	88.1	76.7	56.9	46.1	97.2
S.D.	6.742	6.104	11.423	9.239	5.531	5.195	4.121	4.823	7.822	6.195	7.778	7.512	3.638
TOTAL OBS	868	791	868	840	868	840	868	837	840	868	840	868	10196

NOTES \* (BASED ON LESS THAN FULL MONTHS)  
# (AT LEAST ONE DAY LESS THAN 24 OBS)

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

EXTREME VALUES OF MINIMUM TEMPERATURE  
(FROM DAILY OBSERVATIONS)

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 59-87

YEAR	WHOLE DEGREES FAHRENHEIT -N-O-N-T-H-S-												ALL MONTHS
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
59									25	15	-6	5	
60	-21	-20	-17	14	21	39	45	44	32	22	-7	-22	-22
61	-27	-19	11	11	24	43	46	47	26	16	0	-21	-27
62	-30	-28	-31	11	26	37	44	44	29	16	12	-18	-31
63	-28	-20	-4	16	28	39	49	39	34	25	-4	-30	-30
64	-25	-19	-18	12	29	27	48	33	24	21	-22	-25	-25
65	-33	-21	-15	26	26	41	42	33	23	23	-2	-11	-33
66	-33	-32	-13	22	22	37	51	44	31	17	-8	-21	-33
67	-28	-36	-21	9	2	36	39	33	24	15	-1	-35	-36
68	-35	-18	-3	18	21	40	41	34	35	25	5	-23	-35
69	-28	-24	-13	7	28	35	46	43	32	17	0	-14	-28
70	-34	-27	-13	0	29	45	49	41	28	21	-7	-25	-34
71	-28	-21	4	15	32	43	44	42	35	22	5	-13	-28
72	-31	-21	-20	12	31	40	44	40	34	13	-2	-19	-31
73	-26	-14	22	18	28	39	42	44	23	29	6	-25	-26
74	-27	-25	-17	12	30	44	48	42	25	24	9	-1	-27
75	-15	-17	-11	-3	31	41	45	44	37	26	-4	-18	-18
76	-20	-11	-10	23	20	38	45	44	24	7	-12	-28	-28
77	-30	-19	-2	17	29	44	45	40	35	21	-17	-29	-30
78	-25	-24	-16	20	30	38	44	41	38	23	-9	-16	-25
79	-25	-29	-10	-1	28	43	47	36	34	17	6	-9	-29
80	-18	-17	-16	21	27	35	47	45	29	19	11	-14	-18
81	-12	-18	4	16	24	44	46	44	31	18	15	-12	-18
82	-27	-23	-3	8	27	35	51	34	34	24	-2	-3	-27
83	-13	-18	8	19	24	37	40	50	32	27	11	-30	-30
84	-21	-15	-10	25	27	44	47	43	28	14	2	-18	-21
85	-25	-23	-2	20	34	37	45	41	24	20	-28	-20	-28
86	-25	-14	-6	22	26	38	53	35	32	22	-7	-11	-25
87	-17	7	-3	20	33	41	48						
MEAN	-25.3	-20.2	-8.0	14.6	26.3	39.3	45.8	40.7	29.9	20.0	-2.0	-18.1	-27.5
S.D.	6.162	7.724	11.137	7.563	5.976	3.924	3.296	4.646	4.666	4.903	10.147	9.285	4.972
TOTAL OBS	868	791	868	840	868	840	868	837	840	868	840	868	10196

NOTES \* (BASED ON LESS THAN FULL MONTHS)  
# (AT LEAST ONE DAY LESS THAN 24 OBS)

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

DRY-BULB TEMPERATURES DEG F FROM  
HOURLY OBSERVATIONS

MEANS AND STANDARD DEVIATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-87

HOURS	STATS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
LST														
00-02	MEAN	6.0	11.7	24.2	37.2	49.1	57.1	63.2	59.6	50.8	41.1	24.8	11.0	36.4
	SD	15.040	15.718	12.053	9.009	9.512	7.641	6.259	7.907	8.838	8.384	12.770	14.000	22.346
	TOT OBS	930	846	930	900	930	900	930	930	900	930	900	930	10956
03-05	MEAN	5.3	10.8	23.1	35.3	46.5	54.8	61.0	57.4	49.1	39.7	24.0	10.2	34.9
	SD	15.162	15.848	12.216	8.408	9.397	7.542	6.184	7.751	8.504	8.163	12.711	14.066	21.790
	TOT OBS	930	846	930	900	930	900	930	930	900	930	900	930	10956
06-08	MEAN	4.7	10.0	22.6	36.8	50.3	59.0	64.7	59.7	49.8	39.1	23.5	9.6	35.9
	SD	15.354	16.091	12.540	9.151	9.465	7.159	5.907	7.466	8.215	8.002	12.693	13.905	23.197
	TOT OBS	930	846	930	900	930	900	930	930	900	930	900	930	10956
09-11	MEAN	6.2	12.5	26.4	45.0	59.4	66.6	73.3	68.8	58.0	45.3	26.4	11.0	41.7
	SD	15.241	15.795	12.368	11.875	11.174	7.824	6.387	7.816	9.394	8.639	13.403	13.911	25.941
	TOT OBS	930	846	930	900	930	900	930	930	900	930	900	930	10956
12-14	MEAN	10.0	16.5	30.4	50.5	64.7	71.2	78.3	74.6	63.6	50.9	30.5	14.3	46.4
	SD	14.814	14.774	12.102	13.412	12.240	8.774	6.929	8.983	11.147	10.284	14.321	13.644	26.759
	TOT OBS	930	846	930	900	930	900	930	930	900	930	900	930	10956
15-17	MEAN	10.8	17.8	31.8	52.2	66.1	72.7	80.1	76.1	64.8	51.6	30.5	14.5	47.6
	SD	14.459	14.407	11.825	13.892	12.218	8.952	7.235	9.403	11.535	10.651	14.303	13.629	27.097
	TOT OBS	930	846	930	900	930	900	930	930	900	930	900	930	10956
18-20	MEAN	8.2	15.1	28.9	47.8	62.3	69.5	76.0	71.4	59.2	45.7	27.0	12.2	43.7
	SD	14.493	14.805	11.279	12.468	11.279	8.332	6.908	8.802	10.137	9.202	13.282	13.886	26.194
	TOT OBS	930	846	930	900	930	900	927	930	900	930	900	930	10953
21-23	MEAN	6.8	13.2	26.0	41.0	54.2	61.6	67.3	63.5	53.2	42.5	25.3	11.4	38.9
	SD	14.943	15.408	11.482	10.001	9.627	7.546	6.522	7.960	9.124	8.784	13.043	14.028	23.533
	TOT OBS	930	846	930	900	930	900	927	930	900	930	900	930	10953
ALL	MEAN	7.3	13.5	26.7	43.2	56.6	64.1	70.5	66.4	56.0	44.5	26.5	11.8	40.7
	SD	15.077	15.574	12.405	12.790	12.801	10.236	9.493	10.731	11.290	10.105	13.564	13.980	25.107
	TOT OBS	7440	6768	7440	7200	7440	7200	7434	7440	7200	7440	7200	7440	87642

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

WET-BULB TEMPERATURES DEG F FROM  
HOURLY OBSERVATIONS

MEANS AND STANDARD DEVIATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-87

HOURS LST	STATS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
00-02	MEAN	5.3	10.9	22.7	34.2	43.6	52.6	59.2	55.7	47.1	37.9	22.9	10.1	33.6
	SD	14.570	15.302	11.668	7.868	8.465	7.161	5.840	7.139	8.245	7.643	12.024	13.663	20.839
	TOT OBS	930	846	930	900	930	900	930	930	900	930	900	930	10956
03-05	MEAN	4.6	10.1	21.7	32.7	42.0	51.2	57.7	54.2	45.9	36.9	22.2	9.4	32.5
	SD	14.697	15.472	11.880	7.649	8.581	7.271	6.077	7.207	8.047	7.561	12.069	13.709	20.658
	TOT OBS	930	846	930	900	930	900	930	930	900	930	900	929	10955
06-08	MEAN	4.0	9.3	21.2	34.0	44.8	54.0	60.2	55.9	46.5	36.5	21.8	8.7	33.2
	SD	14.914	15.709	12.143	8.128	8.349	6.490	5.306	6.764	7.805	7.515	12.087	13.587	21.615
	TOT OBS	929	846	930	900	930	900	930	930	900	930	900	930	10955
09-11	MEAN	5.5	11.6	24.4	39.2	49.7	57.8	64.3	60.7	51.6	40.8	24.2	10.0	36.8
	SD	14.751	15.263	11.644	9.211	8.378	6.294	5.168	6.198	7.573	7.284	12.347	13.515	22.561
	TOT OBS	925	846	930	900	929	900	930	930	900	930	898	930	10948
12-14	MEAN	9.0	15.2	27.6	42.2	52.0	59.5	66.0	62.7	53.9	43.9	27.1	13.0	39.5
	SD	14.165	14.134	10.909	9.357	8.283	6.525	5.371	6.484	7.859	7.789	12.413	13.146	21.962
	TOT OBS	927	846	930	900	930	900	930	930	900	930	900	928	10951
15-17	MEAN	9.7	16.4	28.7	42.9	52.5	59.8	66.4	63.0	54.1	44.1	27.1	13.1	39.9
	SD	13.880	13.780	10.511	9.117	7.979	6.478	5.458	6.538	7.842	8.016	12.380	13.163	21.786
	TOT OBS	930	845	930	900	930	900	930	930	900	930	899	929	10953
18-20	MEAN	7.4	14.1	26.7	40.8	50.8	58.7	65.3	61.3	51.7	40.9	24.6	11.2	37.9
	SD	14.047	14.341	10.535	8.849	7.925	6.577	5.412	6.732	7.965	7.856	12.205	13.485	22.077
	TOT OBS	930	846	930	899	930	900	927	930	900	930	899	930	10951
21-23	MEAN	6.1	12.3	24.4	36.9	46.9	55.2	61.7	57.9	48.4	38.9	23.3	10.4	35.3
	SD	14.491	14.977	11.083	8.169	8.052	6.840	5.700	7.009	8.124	7.902	12.161	13.594	21.330
	TOT OBS	929	846	930	900	930	900	927	930	900	930	900	930	10952
ALL HOURS	MEAN	6.5	12.5	24.7	37.9	47.8	56.1	62.6	58.9	49.9	40.0	24.2	10.7	36.1
	SD	14.562	15.063	11.600	9.329	9.066	7.389	6.372	7.491	8.525	8.180	12.356	13.562	21.772
	TOT OBS	7430	6767	7440	7199	7439	7200	7434	7440	7200	7440	7196	7436	87621

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

DEW-POINT TEMPERATURES DEG F FROM  
HOURLY OBSERVATIONS

MEANS AND STANDARD DEVIATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-87

HOURS LST	STATS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
	MEAN	-1.8	4.8	18.1	29.5	37.2	48.7	56.3	52.6	43.3	33.5	17.6	3.2	28.7
00-02	SD	17.741	18.652	13.772	8.924	10.106	8.141	6.536	7.813	9.258	8.496	13.882	17.089	22.841
	TOT OBS	930	846	930	900	930	900	930	930	900	930	900	930	10956
	MEAN	-2.7	3.9	17.1	28.4	36.3	47.8	55.2	51.6	42.5	32.7	16.9	2.5	27.8
03-05	SD	17.980	18.890	14.150	8.862	10.034	8.169	6.747	7.770	8.931	8.341	14.022	17.177	22.849
	TOT OBS	930	846	930	900	930	900	930	930	900	930	900	929	10955
	MEAN	-3.4	3.0	16.5	29.3	38.5	49.8	57.1	53.0	43.1	32.6	16.5	1.7	28.3
06-08	SD	18.454	19.208	14.412	9.250	9.819	7.595	6.061	7.373	8.694	8.321	14.105	17.039	23.694
	TOT OBS	929	846	930	900	930	900	930	930	900	930	900	930	10955
	MEAN	-1.8	5.2	19.0	31.5	39.9	50.9	58.5	55.0	45.7	35.2	18.3	2.8	30.2
09-11	SD	17.868	18.507	13.662	9.916	10.323	8.409	6.957	7.717	8.762	8.006	14.074	16.941	23.660
	TOT OBS	925	846	930	900	929	900	930	930	900	930	898	930	10948
	MEAN	1.7	8.8	21.5	32.0	39.6	50.5	58.5	54.7	45.5	35.8	20.1	5.6	31.3
12-14	SD	16.928	17.023	12.600	9.805	10.728	9.087	7.681	8.487	9.472	8.650	13.503	16.538	22.350
	TOT OBS	927	846	930	900	930	900	930	930	900	930	900	928	10951
	MEAN	2.5	10.1	22.5	31.8	39.3	50.0	58.0	54.1	44.9	35.4	20.1	5.8	31.3
15-17	SD	16.619	16.686	12.017	9.214	10.686	9.170	7.877	8.711	9.679	9.123	13.405	16.612	21.848
	TOT OBS	930	845	930	900	930	900	930	930	900	930	899	929	10953
	MEAN	.3	8.0	21.5	31.9	39.4	50.3	58.6	54.2	44.7	34.7	18.8	4.3	30.7
18-20	SD	17.080	17.486	12.249	9.297	10.501	9.109	7.433	8.601	9.547	9.062	13.729	16.978	22.679
	TOT OBS	930	846	930	899	930	900	927	930	900	930	899	930	10951
	MEAN	-0.9	6.3	19.9	31.1	38.8	49.8	57.9	53.6	43.7	33.9	17.8	3.5	29.7
21-23	SD	17.595	18.210	12.961	9.130	10.252	8.427	6.672	8.190	9.291	8.964	13.845	16.955	22.911
	TOT OBS	929	846	930	900	930	900	927	930	900	930	900	930	10952
	MEAN	-0.8	6.3	19.5	30.7	38.6	49.7	57.5	53.6	44.2	34.2	18.3	3.7	29.7
ALL	SD	17.567	18.244	13.408	9.394	10.374	8.578	7.108	8.162	9.274	8.701	13.873	16.965	22.896
HOURS	TOT OBS	7430	6767	7440	7199	7439	7200	7434	7440	7200	7440	7196	7436	87621

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JAN

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN	TOTAL
		10%	20%	30%	40%	50%	60%	70%	80%	90%	RELATIVE HUMIDITY	NUM OBS
JAN	00-02	100.0	100.0	100.0	96.8	89.0	71.9	51.2	28.4	12.2	70.4	930
	03-05	100.0	100.0	100.0	96.1	88.0	71.0	50.0	28.4	9.7	69.9	930
	06-08	100.0	100.0	99.9	96.2	85.9	70.7	49.4	29.7	9.5	69.6	929
	09-11	100.0	100.0	100.0	96.9	88.3	71.0	48.8	28.2	9.4	69.9	925
	12-14	100.0	100.0	99.9	97.0	89.1	70.6	46.4	22.8	7.8	69.1	927
	15-17	100.0	100.0	100.0	98.2	89.2	70.4	48.2	24.1	7.3	69.6	930
	18-20	100.0	100.0	100.0	97.6	89.1	70.8	52.7	27.3	10.3	70.6	930
	21-23	100.0	100.0	100.0	97.7	88.7	71.8	51.9	28.6	12.1	70.7	929
	TOTALS	100.0	100.0	100.0	97.1	88.4	71.0	49.8	27.2	9.8	70.0	7430

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: FEB

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN										MEAN	TOTAL
		10%	20%	30%	40%	50%	60%	70%	80%	90%	RELATIVE HUMIDITY	NUM OBS	
FEB	00-02	100.0	100.0	100.0	99.1	90.8	79.8	61.3	37.0	13.4	73.7	846	
	03-05	100.0	100.0	100.0	98.9	91.8	79.7	58.6	35.6	15.5	73.5	846	
	06-08	100.0	100.0	100.0	99.1	91.4	79.9	56.9	33.3	15.7	73.3	846	
	09-11	100.0	100.0	100.0	99.4	91.6	80.5	56.1	28.8	12.6	72.4	846	
	12-14	100.0	100.0	100.0	99.2	93.1	77.7	52.7	27.9	10.2	71.7	846	
	15-17	100.0	100.0	100.0	99.2	94.1	78.0	52.7	29.0	11.4	72.1	845	
	18-20	100.0	100.0	100.0	99.3	93.6	80.3	57.8	34.2	13.1	73.5	846	
	21-23	100.0	100.0	100.0	99.2	93.1	80.7	60.6	35.6	14.2	74.0	846	
	TOTALS	100.0	100.0	100.0	99.2	92.4	79.6	57.1	32.7	13.3	73.0	6767	



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: MAR

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN										MEAN RELATIVE HUMIDITY	TOTAL NUM OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%			
MAR	00-02	100.0	100.0	100.0	99.8	97.7	90.3	73.1	46.7	16.1	78.0	930	
	03-05	100.0	100.0	100.0	99.8	97.4	89.2	73.3	45.4	19.5	78.1	930	
	06-08	100.0	100.0	100.0	99.9	97.0	88.6	73.1	45.1	20.5	78.0	930	
	09-11	100.0	100.0	100.0	98.9	93.1	84.7	60.9	37.8	14.0	74.5	930	
	12-14	100.0	100.0	99.4	96.6	89.0	76.3	52.0	29.0	7.7	70.7	930	
	15-17	100.0	100.0	98.8	97.0	89.2	72.9	50.0	26.1	7.8	70.0	930	
	18-20	100.0	100.0	99.9	98.8	95.2	85.3	62.3	35.9	11.9	74.6	930	
	21-23	100.0	100.0	100.0	99.8	97.5	90.8	72.8	44.7	16.3	77.8	930	
	TOTALS	100.0	100.0	99.8	98.8	94.5	84.8	64.7	38.8	14.2	75.2	7440	

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: APR

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN	TOTAL
		10%	20%	30%	40%	50%	60%	70%	80%	90%	[RELATIVE HUMIDITY]	NUP OBS
APR	00-02	100.0	100.0	99.7	98.9	93.6	84.2	65.3	40.7	13.6	75.1	900
	03-05	100.0	100.0	100.0	99.8	97.0	88.1	70.8	41.3	16.3	77.0	900
	06-08	100.0	100.0	100.0	99.0	94.9	84.6	66.4	39.1	14.4	75.4	900
	09-11	100.0	99.2	96.0	86.2	74.3	55.8	30.4	14.3	5.6	61.9	900
	12-14	100.0	96.6	86.7	71.6	57.0	34.8	18.1	9.4	2.1	53.1	900
	15-17	100.0	93.6	81.1	65.6	47.9	32.2	17.1	7.3	1.7	50.3	900
	18-20	100.0	97.0	89.5	80.3	67.0	47.4	27.0	12.1	3.7	58.0	895
	21-23	100.0	99.9	98.0	93.7	86.2	74.1	52.6	29.9	10.4	70.1	900
	TOTALS	100.0	98.3	93.9	86.9	77.2	62.7	43.5	24.3	8.5	65.1	7195

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 76-87  
MONTH: MAY

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NUM OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
MAY	00-02	100.0	100.0	99.2	93.7	79.2	61.5	39.1	16.9	6.7	65.4	930
	03-05	100.0	100.0	100.0	97.2	87.6	68.8	46.2	22.9	8.3	68.9	930
	06-08	100.0	100.0	99.5	94.5	80.8	61.5	39.8	17.8	6.2	65.7	930
	09-11	100.0	99.1	89.0	66.2	46.4	29.9	19.1	8.8	2.6	51.8	929
	12-14	100.0	93.0	71.1	45.7	30.0	19.5	13.2	6.5	1.8	43.8	930
	15-17	100.0	89.7	65.4	39.8	26.7	17.5	12.8	5.8	1.8	41.6	930
	18-20	100.0	94.5	77.8	53.8	35.7	23.7	14.9	7.2	2.6	46.8	930
	21-23	100.0	99.9	95.4	82.4	63.8	46.2	27.5	12.8	4.5	58.9	930
	TOTALS	100.0	97.0	87.2	71.7	56.3	41.1	26.6	12.3	4.3	55.4	7439

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUN

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NUP OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JUN	00-02	100.0	100.0	100.0	99.9	95.8	84.6	62.4	31.0	10.4	74.3	90L
	03-05	100.0	100.0	100.0	100.0	98.8	92.0	75.0	40.3	13.2	77.9	90L
	06-08	100.0	100.0	99.9	99.0	95.0	81.1	57.2	28.7	8.1	72.7	90L
	09-11	100.0	99.8	97.1	86.6	65.9	44.6	25.7	11.0	3.6	59.3	90L
	12-14	100.0	99.2	91.6	65.2	44.7	26.0	15.9	7.6	2.9	50.8	90L
	15-17	100.0	98.8	85.7	57.6	35.3	21.8	12.8	5.7	1.4	47.5	90L
	18-20	100.0	99.9	94.1	72.7	49.1	30.9	18.1	7.7	2.0	53.2	90L
	21-23	100.0	100.0	100.0	97.3	85.1	63.9	40.1	18.4	5.2	66.8	90L
TOTALS		100.0	99.7	96.1	84.8	71.2	55.6	38.4	18.8	5.9	62.8	720L

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 78-87  
MONTH: JUL

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NUM OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
JUL	00-02	100.0	100.0	100.0	100.0	98.7	94.5	76.0	46.5	10.4	78.6	930
	03-05	100.0	100.0	100.0	100.0	100.0	97.5	86.1	57.3	15.2	81.6	930
	06-08	100.0	100.0	100.0	99.8	98.2	91.3	70.6	42.5	8.8	77.0	930
	09-11	100.0	100.0	99.4	91.9	76.0	49.0	27.4	12.2	1.7	61.5	930
	12-14	100.0	99.9	94.9	76.9	50.5	28.5	12.5	5.1	.6	52.5	930
	15-17	100.0	99.4	91.9	67.6	40.4	20.5	8.2	2.6	.6	48.8	930
	18-20	100.0	100.0	97.1	84.7	63.8	37.6	18.4	6.8	1.2	56.6	927
	21-23	100.0	100.0	100.0	98.9	94.9	82.8	58.6	29.7	4.0	72.7	927
TOTALS		100.0	99.9	97.9	90.0	77.8	62.7	44.7	25.3	5.3	66.2	7434

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: AUG

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN	TOTAL
		10%	20%	30%	40%	50%	60%	70%	80%	90%	RELATIVE HUMIDITY	NUP OBS
AUG	00-02	100.0	100.0	99.9	99.0	97.3	92.7	78.9	44.4	8.5	78.1	930
	03-05	100.0	100.0	100.0	99.4	98.3	96.0	89.1	57.8	14.2	81.5	930
	06-08	100.0	100.0	100.0	99.5	98.2	93.0	78.7	50.6	12.6	79.2	930
	09-11	100.0	99.9	99.1	93.7	77.4	55.3	31.9	14.9	2.8	63.1	930
	12-14	100.0	99.6	94.0	74.2	45.6	27.5	15.1	6.1	.6	52.1	930
	15-17	100.0	98.8	91.3	64.7	37.4	22.2	12.0	5.6	.6	48.8	930
	18-20	100.0	99.8	96.8	84.6	61.3	36.9	21.5	9.8	1.7	56.8	930
	21-23	100.0	100.0	99.6	97.8	92.8	79.2	54.1	26.2	5.9	71.4	930
TOTALS		100.0	99.8	97.6	89.1	76.0	62.9	47.7	26.9	5.9	66.4	7440

GLOBAL CLIMATOLOGY BRANCH  
LSAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: SEP

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NUM OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
SEP	00-02	100.0	100.0	100.0	99.6	96.0	86.1	71.7	40.7	10.7	76.2	900
	03-05	100.0	100.0	100.0	100.0	98.7	91.7	77.9	48.0	13.8	78.7	900
	06-08	100.0	100.0	100.0	100.0	98.7	90.9	77.0	45.2	13.6	78.4	900
	09-11	100.0	100.0	98.9	93.3	80.3	59.7	39.1	19.6	7.2	65.5	900
	12-14	100.0	99.7	92.4	74.1	53.6	35.1	23.6	12.8	3.3	55.1	900
	15-17	100.0	98.8	86.3	68.0	47.4	30.3	20.4	11.7	2.6	52.1	900
	18-20	100.0	99.8	96.8	87.0	70.7	49.2	30.9	15.1	5.2	61.2	900
	21-23	100.0	100.0	99.7	98.0	90.6	76.9	54.9	27.3	8.9	71.4	900
TOTALS		100.0	99.8	96.8	90.0	79.5	65.0	49.4	27.6	8.2	67.3	7200

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: OCT

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN										MEAN	TOTAL
		10%	20%	30%	40%	50%	60%	70%	80%	90%	RELATIVE HUMIDITY	NUM OBS	
OCT	00-02	100.0	100.0	100.0	99.2	96.6	87.7	66.3	34.0	8.1	75.0	931	
	03-05	100.0	100.0	100.0	99.9	97.8	92.3	71.4	38.8	9.4	76.6	931	
	06-08	100.0	100.0	100.0	100.0	98.8	94.2	75.2	43.9	11.1	78.0	931	
	09-11	100.0	100.0	99.9	97.2	89.1	73.0	46.8	22.5	7.5	69.1	931	
	12-14	100.0	100.0	96.0	85.2	66.5	42.2	25.6	12.7	5.3	58.9	931	
	15-17	100.0	99.7	93.8	79.7	58.9	38.8	24.6	12.8	4.8	57.1	931	
	18-20	100.0	100.0	98.7	95.4	85.3	64.4	45.1	23.3	6.2	67.4	931	
	21-23	100.0	100.0	100.0	98.3	93.5	81.5	59.5	32.8	6.5	72.9	931	
TOTALS		100.0	100.0	98.6	94.4	85.8	71.8	51.8	27.6	7.4	69.4	7440	



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: NOV

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NUM OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
NOV	00-02	100.0	100.0	100.0	99.8	95.9	87.4	61.9	33.1	10.4	74.4	901
	03-05	100.0	100.0	100.0	99.7	96.2	88.1	63.0	33.2	11.8	74.6	901
	06-08	100.0	100.0	100.0	99.8	95.8	89.7	64.1	34.6	11.2	75.0	901
	09-11	100.0	100.0	99.9	98.4	93.1	83.2	54.6	28.3	9.6	72.2	896
	12-14	100.0	100.0	98.2	95.3	85.1	67.7	40.7	19.1	6.0	66.9	901
	15-17	100.0	99.7	98.4	96.7	85.8	70.1	39.8	17.8	5.0	66.8	899
	18-20	100.0	100.0	99.9	98.4	94.0	81.4	54.4	27.7	6.7	71.9	895
	21-23	100.0	100.0	100.0	99.4	95.0	85.6	59.7	29.3	8.7	73.6	901
TOTALS		100.0	100.0	99.6	98.4	92.6	81.7	54.8	27.9	8.7	71.9	7196

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-86  
MONTH: DEC

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN									MEAN RELATIVE HUMIDITY	TOTAL NUP OBS
		10%	20%	30%	40%	50%	60%	70%	80%	90%		
DEC	00-02	100.0	100.0	100.0	99.2	89.0	71.4	52.7	32.0	12.0	71.1	930
	03-05	100.0	100.0	100.0	98.7	88.4	70.9	51.9	31.5	13.1	71.0	929
	06-08	100.0	100.0	100.0	98.3	88.9	69.9	51.6	29.2	12.5	70.6	930
	09-11	100.0	100.0	100.0	97.8	87.6	68.9	49.8	29.5	10.6	69.9	930
	12-14	100.0	100.0	99.9	97.4	85.7	68.6	46.7	25.3	8.6	68.6	928
	15-17	100.0	100.0	99.9	97.5	85.3	68.5	49.1	25.3	8.6	69.0	929
	18-20	100.0	100.0	100.0	98.4	86.8	71.9	50.4	31.8	11.3	70.7	930
	21-23	100.0	100.0	100.0	98.9	88.7	71.6	51.2	30.9	11.0	70.9	930
	TOTALS	100.0	100.0	100.0	98.3	87.6	70.2	50.4	29.4	11.0	70.2	7436

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-87  
MONTH: ALL

MONTH	HOURS (LST)	PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN										MEAN	TOTAL
		10%	20%	30%	40%	50%	60%	70%	80%	90%	RELATIVE HUMIDITY	NUM OBS	
JAN	ALL	100.0	100.0	100.0	97.1	88.4	71.0	49.8	27.2	9.8	70.0	7430	
FEB		100.0	100.0	100.0	99.2	92.4	79.6	57.1	32.7	13.3	73.0	6767	
MAR		100.0	100.0	99.8	98.8	94.5	84.8	64.7	38.8	14.2	75.2	7440	
APR		100.0	98.3	93.9	86.9	77.2	62.7	43.5	24.3	8.5	65.1	7199	
MAY		100.0	97.0	87.2	71.7	56.3	41.1	26.6	12.3	4.3	55.4	7439	
JUN		100.0	99.7	96.1	84.8	71.2	55.6	38.4	18.8	5.9	62.8	7200	
JUL		100.0	99.9	97.9	90.0	77.8	62.7	44.7	25.3	5.3	66.2	7434	
AUG		100.0	99.8	97.6	89.1	76.0	62.9	47.7	26.9	5.9	66.4	7440	
SEP		100.0	99.8	96.8	90.0	79.5	65.0	49.4	27.6	8.2	67.3	7200	
OCT		100.0	100.0	98.6	94.4	85.8	71.8	51.8	27.6	7.4	69.4	7440	
NOV		100.0	100.0	99.6	98.4	92.6	81.7	54.8	27.9	8.7	71.9	7196	
DEC		100.0	100.0	100.0	98.3	87.6	70.2	50.4	29.4	11.0	70.2	7436	
TOTALS		100.0	99.5	97.3	91.6	81.6	67.4	48.2	26.6	8.5	67.7	87621	

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**PRESSURE SUMMARIES**

**STATION PRESSURE SUMMARIES**

**DATA DERIVED FROM HOURLY OBSERVATIONS.**

**SUMMARIZED BY THE STANDARD 3-HOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED).**

**PRESENTED ARE THE MEANS, STANDARD DEVIATIONS AND OBSERVATION COUNTS.**

**SEA LEVEL PRESSURE SUMMARIES**

**DATA DERIVED FROM HOURLY OBSERVATIONS.**

**SUMMARIZED BY THE STANDARD 3-HOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED).**

**PRESENTED ARE THE MEANS, STANDARD DEVIATIONS AND OBSERVATION COUNTS.**

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

STATION PRESSURE IN INCHES HG FROM  
HOURLY OBSERVATIONS

MEANS AND STANDARD DEVIATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-87

HOURS LST	STATS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
03	MEAN	29.113	29.109	29.035	28.992	28.950	28.915	28.945	28.970	28.983	28.988	29.035	29.052	29.007
	SD	.283	.258	.236	.227	.199	.172	.150	.164	.219	.227	.275	.299	.238
	TOT OBS	310	282	310	300	310	300	310	310	300	310	300	310	3652
06	MEAN	29.114	29.107	29.026	28.988	28.949	28.912	28.941	28.969	28.979	28.987	29.031	29.054	29.004
	SD	.284	.262	.241	.229	.206	.178	.153	.164	.223	.226	.281	.299	.240
	TOT OBS	310	282	310	300	310	300	310	310	300	310	300	310	3652
09	MEAN	29.109	29.105	29.030	29.000	28.962	28.927	28.956	28.981	28.988	28.993	29.028	29.052	29.010
	SD	.284	.268	.247	.235	.206	.182	.157	.167	.224	.226	.286	.297	.241
	TOT OBS	310	282	310	300	310	300	310	310	300	310	300	310	3652
12	MEAN	29.121	29.117	29.045	29.009	28.971	28.937	28.965	28.989	28.997	29.008	29.040	29.066	29.022
	SD	.286	.270	.250	.238	.207	.184	.156	.168	.228	.229	.288	.295	.243
	TOT OBS	310	282	310	300	310	300	310	310	300	310	300	310	3652
15	MEAN	29.122	29.119	29.044	28.999	28.952	28.928	28.957	28.978	28.987	29.002	29.035	29.063	29.015
	SD	.283	.268	.249	.235	.205	.179	.153	.168	.226	.229	.286	.295	.243
	TOT OBS	310	282	310	300	310	300	310	310	300	310	300	310	3652
18	MEAN	29.094	29.092	29.021	28.973	28.924	28.911	28.938	28.954	28.960	28.973	29.015	29.043	28.991
	SD	.280	.261	.241	.227	.200	.173	.151	.163	.221	.226	.277	.291	.237
	TOT OBS	310	282	310	300	310	300	310	310	300	310	300	310	3652
21	MEAN	29.108	29.103	29.021	28.967	28.910	28.896	28.924	28.941	28.958	28.980	29.029	29.055	28.990
	SD	.278	.257	.233	.222	.196	.168	.147	.163	.217	.222	.271	.290	.236
	TOT OBS	310	282	310	300	310	300	309	310	300	310	300	310	3651
ALL	MEAN	29.108	29.109	29.033	28.989	28.933	28.911	28.937	28.959	28.982	28.989	29.032	29.054	29.002
	SD	.283	.257	.229	.221	.194	.166	.148	.163	.216	.227	.271	.294	.235
	TOT OBS	310	282	310	300	310	300	309	310	300	310	300	310	3651
HOURS	MEAN	29.111	29.107	29.032	28.990	28.944	28.917	28.946	28.968	28.979	28.990	29.030	29.055	29.005
	SD	.282	.262	.241	.229	.202	.175	.152	.165	.222	.226	.279	.295	.239
	TOT OBS	2480	2256	2480	2400	2480	2400	2478	2480	2400	2480	2400	2480	29214

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

SEA LEVEL PRESSURE IN HGS FROM  
HOURLY OBSERVATIONS

MEANS AND STANDARD DEVIATIONS

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 77-87

HOURS LST	STATS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANA
00	MEAN	1021.7	1021.3	1018.1	1015.8	1013.9	1012.4	1013.3	1014.2	1015.0	1015.6	1018.0	1019.3	1016.5
	SD	10.416	9.511	8.615	8.149	7.178	6.175	5.398	5.846	7.899	8.147	9.987	10.999	8.868
	TOT OBS	310	282	310	300	310	300	310	310	300	310	300	310	3652
03	MEAN	1021.7	1021.2	1017.8	1015.7	1013.8	1012.3	1013.1	1014.2	1014.9	1015.6	1017.8	1019.3	1016.4
	SD	10.385	9.667	8.761	8.226	7.423	6.383	5.500	5.869	8.016	8.117	10.198	10.967	8.958
	TOT OBS	310	282	310	300	310	299	310	310	300	310	300	310	3651
06	MEAN	1021.6	1021.2	1017.9	1016.2	1014.4	1012.8	1013.6	1014.6	1015.2	1015.9	1017.8	1019.3	1016.7
	SD	10.434	9.896	8.989	8.429	7.434	6.500	5.614	5.974	8.084	8.140	10.338	10.925	8.978
	TOT OBS	310	282	310	300	310	300	310	310	299	310	300	310	3651
09	MEAN	1022.0	1021.6	1018.5	1016.5	1014.6	1013.1	1013.9	1014.9	1015.6	1016.4	1018.3	1019.8	1017.1
	SD	10.510	9.953	9.097	8.534	7.413	6.528	5.589	6.002	8.213	8.180	10.425	10.820	9.037
	TOT OBS	310	282	310	300	310	300	310	310	299	310	300	310	3651
12	MEAN	1022.0	1021.6	1018.4	1016.0	1013.9	1012.8	1013.7	1014.5	1015.2	1016.1	1018.0	1019.7	1016.8
	SD	10.422	9.915	9.053	8.427	7.403	6.398	5.495	5.984	8.190	8.193	10.341	10.804	9.037
	TOT OBS	310	282	310	300	310	300	310	310	299	310	300	310	3651
15	MEAN	1021.0	1020.7	1017.5	1015.2	1012.9	1012.2	1013.0	1013.7	1014.2	1015.1	1017.3	1019.0	1016.0
	SD	10.304	9.642	8.775	8.174	7.192	6.184	5.430	5.858	7.966	8.089	10.016	10.571	8.830
	TOT OBS	310	282	310	300	310	300	310	310	300	310	300	310	3652
18	MEAN	1021.5	1021.1	1017.6	1015.0	1012.5	1011.7	1012.5	1013.3	1014.2	1015.4	1017.9	1019.5	1016.0
	SD	10.241	9.457	8.493	8.004	7.058	5.983	5.307	5.834	7.835	7.982	9.821	10.576	8.840
	TOT OBS	310	282	310	300	310	300	309	310	300	310	300	310	3651
21	MEAN	1021.6	1021.4	1018.1	1015.8	1013.3	1012.2	1012.9	1013.9	1015.0	1015.7	1018.0	1019.5	1016.4
	SD	10.406	9.497	8.371	7.951	6.990	5.896	5.304	5.815	7.810	8.146	9.839	10.788	8.796
	TOT OBS	310	282	310	300	310	300	309	310	300	310	300	310	3651
ALL HOURS	MEAN	1021.7	1021.3	1018.0	1015.8	1013.7	1012.4	1013.2	1014.2	1014.9	1015.7	1017.9	1019.4	1016.5
	SD	10.380	9.686	8.767	8.240	7.284	6.265	5.466	5.912	8.004	8.123	10.112	10.795	8.925
	TOT OBS	2480	2256	2480	2400	2480	2399	2478	2480	2397	2480	2400	2480	29210

END

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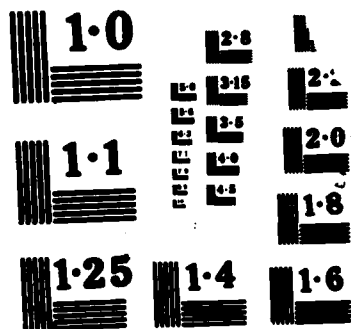




AD-A187 845 GRAND FORKS AIR FORCE BASE NORTH DAKOTA REVISED UNIFORM  
SUMMARY OF SURFAC. (U) AIR FORCE ENVIRONMENTAL  
TECHNICAL APPLICATIONS CENTER SCOTT A. NOV 87  
UNCLASSIFIED USAFETAC/DS-87/873 F/G / NL

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①-A187845

DEPARTMENT OF THE AIR FORCE  
USAF ENVIRONMENTAL TECHNICAL APPLICATIONS CENTER (MAC)  
SCOTT AIR FORCE BASE, ILLINOIS 62225-5458

FROM: LDD (Mrs Cavanaugh AUTOVON 576-2625)

12 Apr 1988

SUBJECT: Input Documents

TO: DTIC-FDAC

Attached are correction pages for ADA187845 USAFETAC/DS-87/073.

*Marianne L. Cavanaugh*

MARIANNE L. CAVANAUGH  
Librarian

ATCH:  
AS SHOWN

11 APR REC'D

ADA187845



DEPARTMENT OF THE AIR FORCE  
OL-A. USAF ENVIRONMENTAL TECHNICAL APPLICATIONS CENTER (MAC)  
FEDERAL BUILDING, ASHEVILLE, NORTH CAROLINA 28801-2723

8 APR 1988

REPLY TO  
ATTN OF

CAC (Mr Bobb)

SUBJECT:

Correction Pages for Grand Forks AFB ND RUSSWO

TO:

Det 15, 9WS     AWSTL

1. References:

- a. 9WS ltr, RUSSWO Discrepancies, 2 Mar 88
- b. 3WW ltr, RUSSWO Discrepancies, 11 Mar 88

2. Ref 1.a. listed nine (9) "discrepancies" for the two bases, Minot and Grand Forks ND. A careful review of procedures, products and data detected only one (1) error in the 1987 RUSSWO for Grand Forks which affected two of their tables. During our quality control process, a snow depth correction of 5 inches (for Jan 75) was erroneously entered as a 24-hour snowfall amount. This error should have been discovered on our post-quality audit, prior to summarization, but the responsible Met Tech overlooked the entry in the wrong field. Once summarized, this type discrepancy is difficult to uncover unless the error causes a significant change in monthly or annual extreme values. The 2.8 inches (vice 7.8 inches) is the correct monthly snowfall total for Jan 75.

3. The remaining values for the most current RUSSWO are correct for Grand Forks. The differences in values are the result of more indepth quality control applied to the data; insertion of missing observations, insuring addition of precipitation amounts are correct, etc. Note that in each case cited, the latest summarized values (including the max temp 34°) are larger, due to additional data quality control procedures. Future letters of transmission and the "blurbs" (textual information) in the RUSSWO will address "possible value changes".

4. Attached are correction pages for the Grand Forks AFB ND (AWSMSC # 727575) RUSSWO. Please replace the incorrect summaries with these pages. AWSTL will revise their microfiche copies and distribute them to the appropriate customers. (Note: The error did not affect the AWS Climatic Brief for Grand Forks.)

5. We regret any inconvenience this error may have caused. If you have further question concerning these summaries, please contact Mr Bobb or Mr Fountain, AV 697-8358.

SIGNED

HENRY M FOUNTAIN  
Supervisor, Climatic Applications Section

1 Atch  
Corrected RUSSWO Summaries

cc: 9WS/DON wo atch  
3WW/DNC wo atch  
USAFETAC/ECR wo atch

**AIR WEATHER SERVICE/MAC**

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND PERIOD OF RECORD: 59-87

PERIOD OF RECORD: 59-87

MONTH	NONE	TRACE	1	2	3	4	7	10	12	13	AMOUNTS IN INCHES								OVER 120	61 TO 120	DAYS WITH MEAS AMTS	TOTAL OBS	MONTHLY AMOUNTS MEAN GREATEST LEAST
											24	26	28	30	32	34	36	38					
JAN	1-7	3-5	9-7	4-7	12-6	22-1	32-4	12-9		-3								94-8	867				
FEB	3-2	4-9	13-3	11-4	5-6	19-0	25-8	14-8		2-1								91-9	791				
MAR	17-2	17-3	11-8	7-6	6-8	16-7	15-7	5-5		1-5								65-6	868				
APR	73-5	11-8	4-5	1-9	1-9	4-6	1-3	-5										14-8	840				
MAY	99-0	-5	-3	.1	.1													.6	868				
JUN	100-0																		862				
JUL	100-0																		890				
AUG	100-0																		862				
SEP	99-8		-2															.2	840				
OCT	95-0	2-5	-9	-8	-5	.2												2-4	867				
NOV	51-1	16-1	9-2	9-3	3-3	6-8	2-5	1-8										32-9	840				
DEC	9-9	12-3	15-1	15-8	10-0	17-7	14-1	5-1										77-8	868				
ANN	62-5	5-7	5-4	4-3	3-4	7-3	7-6	3-4		-3								31-7	10263				

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SNOWFALL  
FROM SUMMARY OF DAY DATA

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 59-87

MONTH	AMOUNTS IN INCHES												3 DAYS WITH MEAS AMTS	TOTAL OBS	MEAN	GREATEST LEAST
	NONE	TRACE	0.1 TO 0.4	0.5 TO 1.4	1.5 TO 2.4	2.5 TO 3.4	3.5 TO 4.4	4.5 TO 6.4	6.5 TO 10.4	10.5 TO 15.4	15.5 TO 25.4	25.5 TO 50.4				
JAN	34.8	39.0	11.7	9.4	2.5	1.5	.5	.7					26.2	866	7.5	21.1 1.1
FEB	39.6	35.8	12.3	8.1	2.7	.8	.1	.6	.1				24.7	791	6.1	32.9 1.3
MAR	53.9	26.8	9.6	4.1	2.6	.8	.9	.6	.5	.1			19.2	868	7.7	26.0 TRACE
APR	80.1	11.4	2.7	3.0	1.2	1.0	.1	.2	.2				8.5	840	3.5	14.5 TRACE
MAY	96.7	2.4	.3	.3		.2							.9	868	.3	4.4 .0
JUN	100.0													862	.0	.0 .0
JUL	100.0													890	.0	.0 .0
AUG	100.0													862	.0	.0 .0
SEP	98.7	1.1		.1	.1								.2	840	.1	1.5 .0
OCT	89.5	7.6	.5	1.2	.7	.1	.1	.3					2.9	868	1.6	7.6 .0
NOV	58.1	25.0	7.0	5.0	1.9	1.5	.5	.7	.2				16.9	840	6.5	22.8 .1
DEC	38.6	39.0	10.3	7.5	3.0	.8	.3	.2	.2				22.4	867	6.4	15.4 .2
ANN	74.2	15.7	4.5	3.2	1.2	.6	.2	.3	.1	.0			10.2	10262	39.7	

No 550H  
Feb 50

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

STATION NUMBER: 727575 STATION NAME: GRAND FORMS AFB MO PERIOD OF RECORD: 59-87

DAILY SNOW DEPTH IN INCHES  
-M-O-N-T-H-S-

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ALL MONTHS
59	5	4	2	5	0	0	0	0	0	3	7	2	8
60	8	5	1	TRACE	TRACE	0	0	0	0	TRACE	4	6	8
61	9	9	13	7	0	0	0	0	0	TRACE	3	6	8
62	3	2	2	1	TRACE	0	0	0	0	0	5	4	13
63	3	2	7	5	0	0	0	0	0	0	2	9	9
64	3	2	7	5	0	0	0	0	0	0	4	16	16
65	18	17	9	7	0	0	0	0	0	0	8	7	18
66	9	9	30	6	1	0	0	0	0	0	3	7	30
67	22	21	10	4	3	0	0	0	0	1	0	5	22
68	8	5	2	1	0	0	0	0	0	2	2	6	8
69	*17	20	20	7	0	0	0	0	0	*1	0	8	20
70	12	13	9	6	0	0	0	0	0	0	4	9	13
71	13	12	5	1	0	0	0	0	0	5	5	3	13
72	4	4	9	6	0	0	0	0	1	3	2	9	9
73	9	1	1	1	0	0	0	0	0	0	6	9	9
74	14	18	14	6	TRACE	0	0	0	0	TRACE	4	6	18
75	6	11	19	17	0	0	0	0	0	0	5	3	19
76	9	9	13	0	0	0	0	0	0	TRACE	TRACE	4	13
77	8	8	7	1	0	0	0	0	0	0	19	18	19
78	15	12	13	3	0	0	0	0	0	0	6	11	15
79	26	36	33	6	1	0	0	0	0	0	2	1	36
80	9	9	11	0	0	0	0	0	0	TRACE	3	2	11
81	1	2	2	0	0	0	0	0	0	0	2	3	3
82	18	16	9	1	0	0	0	0	0	0	2	2	18
83	4	2	2	TRACE	0	0	0	0	0	4	7	7	7
84	6	6	4	TRACE	0	0	0	0	1	TRACE	2	4	6
85	6	6	10	3	0	0	0	0	0	3	20	17	20
86	17	11	5	2	0	0	0	0	0	0	7	4	17
87	5	6	13	TRACE	0	0	0	0	0	0	7	4	17
MEAN	9.9	9.9	9.8	3.4	.2	.0	.0	.0	.1	.9	4.8	6.8	14.5
S.D.	6.191	7.648	8.056	3.756	.612	.000	.000	.000	.262	1.486	4.701	4.459	7.415
TOTAL OBS	867	791	868	840	868	862	890	862	840	867	840	168	10263

NOTE \* (BASED ON LESS THAN FULL MONTHS)



GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

EXTREME VALUES OF SNOWFALL  
(FROM DAILY OBSERVATIONS)

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 59-87

24 HOUR AMOUNTS IN INCHES

-M-O-N-I-H-S-

ALL MONTHS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ALL MONTHS
59	4.6	2.3	.1	4.5	.1	.0	.0	.0	TRACE	4.1	3.9	.2	7.1
60	1.7	1.4	1.4	.5	TRACE	.0	.0	.0	TRACE	TRACE	.8	7.1	7.1
61	1.9	4.1	2.3	1.0	.0	.0	.0	.0	TRACE	TRACE	2.6	.7	2.6
62	.7	2.0	1.6	2.0	TRACE	.0	.0	.0	.0	TRACE	5.4	2.2	5.4
63	3.2	1.1	2.8	3.6	.0	.0	.0	.0	TRACE	TRACE	1.6	7.2	7.2
64	1.1	.6	2.5	7.0	2.5	.0	.0	.0	TRACE	TRACE	4.3	5.6	5.6
65	1.1	1.8	11.6	2.9	TRACE	.0	.0	.0	TRACE	.0	3.5	1.0	7.0
66	2.4	1.3	2.0	4.6	3.4	.0	.0	.0	.0	TRACE	2.1	3.9	11.6
67	4.5	.4	1.8	1.2	TRACE	.0	.0	.0	.0	TRACE	.4	1.1	4.6
68	1.4	.4	.7	TRACE	.0	.0	.0	.0	.0	TRACE	1.0	1.6	2.2
69	2.0	3.0	.7	TRACE	.0	.0	.0	.0	.0	TRACE	.2	*1.4	3.0
70	1.5	.5	3.1	9.7	TRACE	.0	.0	.0	.0	TRACE	1.1	2.5	9.7
71	4.0	1.7	4.0	.5	TRACE	.0	.0	.0	.0	TRACE	1.0	2.0	4.7
72	3.2	1.6	5.2	3.0	TRACE	.0	.0	.0	1.5	1.7	1.4	4.3	5.2
73	.6	.9	1.6	.7	.0	.0	.0	.0	.0	.0	3.1	1.9	3.1
74	3.1	4.5	1.2	.5	TRACE	.0	.0	.0	TRACE	.7	6.1	2.8	6.1
75	4.6	2.3	7.0	3.0	.0	.0	.0	.0	.0	TRACE	5.5	3.0	7.0
76	4.5	5.0	6.0	TRACE	TRACE	.0	.0	.0	.0	.3	.1	1.6	6.0
77	2.0	5.5	2.1	1.0	.0	.0	.0	.0	.0	.3	8.0	4.0	8.0
78	1.7	2.4	2.0	3.1	.0	.0	.0	.0	.0	TRACE	3.0	4.6	4.6
79	4.0	7.3	5.5	1.8	.6	.0	.0	.0	.0	3.1	1.3	1.1	7.3
80	6.0	1.5	4.7	TRACE	.0	.0	.0	.0	.0	.6	2.9	2.0	6.0
81	1.0	1.5	TRACE	TRACE	TRACE	.0	.0	.0	.0	2.0	.4	.4	2.0
82	6.0	2.0	1.8	.8	.0	.0	.0	.0	.0	TRACE	3.1	.6	6.0
83	2.8	1.5	2.7	1.0	.4	.0	.0	.0	.0	TRACE	5.3	1.9	6.2
84	3.0	2.7	2.1	.2	.0	.0	.0	.0	.7	.7	2.2	3.0	3.0
85	1.4	.5	9.5	TRACE	.0	.0	.0	.0	TRACE	6.1	8.7	2.0	9.5
86	3.1	1.2	.2	2.3	.0	.0	.0	.0	.0	TRACE	6.0	1.6	6.0
87	1.5	6.3	3.1	TRACE	.0	.0	.0	.0	.0	TRACE	.0	.0	.0

MEAN	2.73	2.39	3.16	1.96	.25	.00	.00	.00	.08	1.24	3.09	2.59	5.87
S.D.	1.543	1.822	2.743	2.315	.784	.000	.000	.000	.308	1.889	2.321	1.879	2.349
TOTAL OBS	866	791	868	840	868	862	890	862	840	868	840	867	10262

NOTE \* (BASED ON LESS THAN FULL MONTHS)

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

MONTHLY SNOWFALL  
(FROM DAILY OBSERVATIONS)

STATION NUMBER: 727575 STATION NAME: GRAND FORKS AFB ND

PERIOD OF RECORD: 59-67

TOTAL MONTHLY SNOWFALL IN INCHES  
-M-O-N-T-H-S-

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ALL MONTHS
59	6.0	4.0	.3	8.2	.1	.0	.0	.0	TRACE	7.0	12.6	.2	34.8
60	3.4	5.0	1.8	.8	TRACE	.0	.0	.0	.0	TRACE	2.8	13.4	17.1
61	8.2	8.7	10.3	1.4	.0	.0	.0	.0	TRACE	TRACE	3.6	2.5	39.5
62	1.1	3.7	3.6	4.2	TRACE	.0	.0	.0	.0	TRACE	7.2	3.7	27.1
63	4.2	3.1	7.6	8.8	.0	.0	.0	.0	.0	.0	1.8	12.7	42.8
64	2.6	1.3	8.9	7.6	2.5	.0	.0	.0	TRACE	TRACE	5.1	14.0	39.2
65	7.2	2.7	26.0	9.0	TRACE	.0	.0	.0	TRACE	.0	13.4	2.9	57.4
66	21.1	2.8	4.9	5.9	4.4	.0	.0	.0	.0	1.0	1.1	4.3	45.5
67	4.8	1.5	1.8	2.6	TRACE	.0	.0	.0	.0	2.2	2.4	6.8	22.1
68	13.4	8.1	1.5	TRACE	.0	.0	.0	.0	.0	1.6	.5	6.0	31.1
69	4.7	1.8	9.4	14.5	TRACE	.0	.0	.0	.0	TRACE	3.0	10.6	44.0
70	7.0	2.1	9.0	.7	TRACE	.0	.0	.0	.0	5.1	1.8	4.7	30.4
71	5.9	6.1	10.5	9.1	TRACE	.0	.0	.0	1.5	2.4	1.5	7.6	44.6
72	1.6	1.4	2.7	.7	.0	.0	.0	.0	.0	.0	8.7	6.5	21.6
73	8.5	10.0	4.1	.5	TRACE	.0	.0	.0	TRACE	.7	6.5	6.2	36.5
74	2.8	7.8	20.4	5.6	.0	.0	.0	.0	.0	TRACE	8.3	5.3	50.2
75	13.8	8.7	18.0	TRACE	TRACE	.0	.0	.0	.0	.3	.1	6.6	47.5
76	7.5	9.2	6.5	1.0	.0	.0	.0	.0	.0	.3	22.8	15.4	62.7
77	3.4	5.8	2.8	3.1	.0	.0	.0	.0	.0	TRACE	12.8	10.2	38.1
78	17.1	32.9	13.7	7.2	1.6	.0	.0	.0	.0	3.1	3.3	1.1	80.0
79	14.3	9.1	8.5	TRACE	.0	.0	.0	.0	.0	1.2	5.7	3.6	42.4
80	1.9	4.3	TRACE	TRACE	TRACE	.0	.0	.0	.0	4.1	2.5	1.3	13.8
81	18.8	5.1	4.3	.8	.0	.0	.0	.0	.0	TRACE	5.0	1.5	35.5
82	4.6	2.7	4.1	1.0	.4	.0	.0	.0	.0	.0	12.9	6.1	30.0
83	7.9	4.6	4.8	.2	.0	.0	.0	.0	.0	6.2	3.2	7.1	29.8
84	6.8	1.7	24.1	TRACE	.0	.0	.0	.0	.7	1.3	19.3	5.8	65.3
85	8.9	4.3	.3	3.8	.0	.0	.0	.0	TRACE	7.6	9.9	3.1	30.3
86	3.3	11.9	5.7	TRACE	.0	.0	.0	.0	.0	TRACE			
MEAN	7.48	6.08	7.70	3.45	.32	.00	.00	.00	.08	1.58	6.49	6.36	39.44
S.D.	5.355	6.060	7.019	3.923	.971	.000	.000	.000	.308	2.326	5.741	4.137	15.251
TOTAL OBS	866	791	868	840	868	862	890	862	840	868	840	867	10262

NOTE \* BASED ON LESS THAN FULL MONTHS

END

DATE

FILMED

5-88  
DTIC